# Culture, Institutions and Social Equilibria: A Framework*

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February 3, 2024

**Abstract**

This paper proposes a new framework for studying the interplay between culture and institutions. We interpret culture as a "repertoire", consisting of (cultural) attributes and allowing rich cultural responses to political changes. Combinations of attributes produce cultural configurations, which provide social meaning, coordination and political justification. Our framework has several distinctive features. First, it adopts a "systems approach" to culture: the meaning and function of attributes are determined within the whole configuration and political equilibrium. Second, it emphasizes discontinuous or "saltational" changes in culture—rather than gradual, evolutionary changes—as attributes are reconnected and acquire new meanings in response to evolving circumstances and as outcomes in ongoing "cultural struggles". Third, our framework puts the spotlight on how fluidly different cultures can respond to conditions, depending on the nature of their attributes and constraints on their connections. Finally, it enriches the study of the co-determination of political and cultural outcomes.

**Keywords:** attributes, culture, cultural configurations, cultural struggles, discontinuity, fluidity, institutions, politics, saltational change.

**JEL Classification:** P16, P50, O10.

*We are grateful to Tim Besley, Bas van Bavel, Steven Durlauf, Raquel Fernández, Bob Gibbons, Leander Hendring, Chima Korieh, Joel Mokyr, Nathan Nunn, Steve Pincus, Davod Romer, Jared Rubin, Rick Shweder, Susan Silbey, Enrico Spolaore, Ann Swidler, Cihat Tokgöz, Thierry Verdier, Hagay Volvovsky, Parker Whitfill, Nathan Wilmers and David Yang for their comments and suggestions. We also thank the participants in the MIT Sloan economic sociology seminar, NBER culture and institutions conference, and Utrecht States and Institutions conference for comments. We thank the editor and five anonymous referees for their comments and suggestions. We are grateful to Rebecca Jackson, Austin Lentsch and Parker Whitfill for help with the illustrations. Acemoglu gratefully acknowledges financial support from the Hewlett Foundation.

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# 1 Introduction

Cultural theories have once again become popular in economics and political science, offered as explanations for economic, social and political differences between countries, regions, ethnic groups and families. The political scientist Samuel Huntington was at the forefront of this revival, proffering cultural differences as the primary driver of economic and political divergences and international conflict (Huntington, 1993). In the 2000 book *Culture Matters: How Values Shape Human Progress*, he argued: "South Koreans value thrift, investment, hard work, education, organization, and discipline. Ghanaians have very different values" (Huntington, 2000, p. xiii). The economic historian David Landes in the same volume agreed with this perspective, stating "Culture makes almost all the difference" (2000, p. 2) for economic growth and cross-country differences. Many economists and political scientists have reached similar, even if sometimes less extreme, conclusions.

Much of this literature builds on a conceptualization of culture going back to Talcott Parsons. Parsons (1951) viewed culture as a stable and coherent "normative pattern of value-orientations" that helps individuals make decisions and adapt to different circumstances (1951, p. 171). He emphasized the congruence and "logical consistency" of these value orientations as a way of coordinating social interactions (1951, p. 9). Culture thus defined lives at the level of well-delineated groups, such as nations, regions, ethnicities or religions. Partly because of its coherence and logical consistency, Parsons argues, culture tends to be sticky and matters for all sorts of decisions and social outcomes. This Parsonian approach has been adopted by the recent culturalist revival. In the preface of the same book, Huntington and Lawrence Harrison define culture as "the values, attitudes, beliefs and orientations, and assumptions prevalent among people in a society" (p. xv) and proposes that culture is stable, coherent and persistent at the level of such broad groupings. Economists often rely on similar definitions. Guiso, Sapienza and Zingales (2006, p. 23), for example, describe culture "as those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation". Given this approach, it was natural for the recent economics literature to view culture as a major independent variable impacting economics and politics. It was also natural to assume that culture could be measured from its various symbolic and behavioral footprints (such as religions, rituals, kin relations, family structure, and observed civic behaviors like willingness to donate blood, reciprocity, and reported trust in others).

Economists working on culture have recognized that culture is in reality not exogenous or unchanging. Nevertheless, in line with the Parsonian paradigm, they have mostly relied on perspectives originating in biology and anthropology that view cultural change as an evolutionary phenomenon (e.g., Cavalli-Sforza and Feldman, 1981, Boyd and Richerson, 1988, Henrich, 2017). One important implication of this conceptual focus is that cultures do not exhibit discontinuous changes and typically evolve slowly. Nunn (2023) concludes his overview of this area by stating "change is incremental. Because of our reliance on culture and tradition, we are hesitant to change

(a form of status-quo bias)." He continues "This generates historical persistence".

### 1.1 Main Argument

In this paper, we build on but also significantly depart from this paradigm. Our approach to culture has three key building blocks.

*I)* We follow the anthropologist Clifford Geertz's emphasis on identifying cultures with "social meaning" determined by a community, in an effort to communicate and coordinate with others as well as justify certain arrangements. Following Geertz, we define culture as *patterns of beliefs, relationships, rituals, attitudes and obligations that furnish meaning to human interactions and provide a framework for interpreting the world, coordinating expectations and enabling or constraining behaviors.*[1] Critically, culture is not just about "values". Nor does it typically determine a specific type of behavior. Rather, it provides a set of justifications and associated choices that are made in a social context.

*II)* We emphasize, again following Geertz, the plasticity of cultural notions, which often adapt and adjust to circumstances. In the terminology of Ann Swidler (1986, p. 277), culture is

> a "toolkit" or repertoire from which actors select differing pieces for constructing lines of action. Both individuals and groups know how to do different kinds of things in different circumstances.

*III)* We view culture as inseparable from a broader social equilibrium and closely interacting with political and economic power. Most importantly, cultures adjust to institutional and political factors. We model these ideas by distinguishing a *cultural configuration*, which determines how individuals obtain social meaning and justify various economic, political and social choices from a "culture set". Reminiscent of Swidler's repertoire, a *culture set* captures the tools available to individuals and communities in constructing cultural configurations. Formally, it consists of (cultural) *attributes*, and a collection of feasible connections between these attributes. Cultural configurations are formed by wiring these attributes together, subject to the set of feasible connections. A culture set is *slowly-changing* (there is much in common between the English culture set today and 300

[1] This definition heavily borrows from Sewell (2005) and especially from Geertz's (1973, p. 89) famous definition of culture as: "historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and attitudes towards life." Here, symbols are defined as: "tangible formulations of notions, abstractions from experience fixed in perceptible forms, concrete embodiments of ideas, attitudes, judgments, longings or beliefs" (1973, p. 91). Relative to this definition, we drop the emphasis on symbols, which are central in many settings, but less important for our focus here and also less in line with the economics and political science literatures in this area. We additionally drop "historically transmitted", since as we will emphasize, though historically-grounded, social meanings can change discontinuously.

Our ideas, more broadly, build on other key contributions in the modern sociology literature, including Bourdieu (1977), Giddens (1984), Swidler (1986), Rosaldo (1989), D'Andrade (1995) and Patterson (2014). For a recent survey of this literature, see Smith, Ritz and Rotolo (2020).

years ago, as we discuss later). Cultural configurations, on the other hand, can evolve much more rapidly, especially in response to changes in political and economic isfactors.

Although our approach builds on both the recent economics and sociology literatures, it has a number of distinct implications, reflecting the major differences in its assumptions and focus from these earlier literatures. We emphasize four of these here and also use them to explain a number of distinctive implications of our conceptual framework, which to the best of our knowledge are not shared either by earlier contributions in the sociology or the economics literatures.

*First*, our perspective calls for a "systems approach" to culture, whereby cultures can neither be measured nor understood by looking at single attributes. Justification and coordination are achieved by the combination of different attributes and how they are fused together, which in turn determines the exact interpretation of the attributes.[2]

A brief example is useful to illustrate this point. If we focus on single attributes—for example, the emphasis on family and clan in Confucian thought and the centrality of the notion of *Dao* ("*The Way*") which defines virtuous behavior—Chinese culture would appear to be highly hierarchical and persistent, going back to 2,500 years ago. However, as we will argue in greater detail, the persistence of these key cultural attributes does not imply persistence of a cultural configuration. Notably, these attributes can be combined and interpreted in different ways, as they were in Taiwan in the process of building a vibrant democratic culture that remained consistent with Confucian cultural attributes in other spheres of life.

One noteworthy implication of this systems approach is a more nuanced understanding of cultural persistence. The durability of culture sets does not imply persistence of cultural configurations. Nor can we measure cultural persistence by looking at a handful of attributes. Sometimes, the whole cannot be understood from its constituent parts.

*Second,* in contrast to the evolutionary approach, where culture evolves as different values are acquired by individuals during their formative or impressionable years (either from their family or community), cultural configurations can feature "discontinuous jumps", because they are responding to changes in economic and social circumstances, and existing attributes can be combined to generate very different interpretations and justifications for distinct social arrangements. Here, by "discontinuous jumps" we mean major cultural change that takes place rapidly, within the course of several years—in particular, much faster than the generational timescale. Such a possibility was partially anticipated by the sociologist DiMaggio (1997, p. 265) when he wrote:

> once we acknowledge that people behave as if they use culture strategically, it follows that the cultures into which people are socialized leave much opportunity for choice and variation.

[2]The argument that culture must be studied in a more holistic way as a system is also present in Buskell, Enquist and Jansson (2019) and Jansson, Aguilar, Acerbi and Enquist (2021). But their approach and emphases are very different from ours.

But, the implications are more far-reaching than previously recognized. To highlight the distinctive consequences of our approach, we can contrast it with evolutionary models commonly used in economics, for example, as in the pioneering work by Bisin and Verdier (2000, 2001, 2017). These, as in Darwinian evolutionary biology, allow only gradual change in individual and group values taking place, often at the generational timescale (see Roland, 2004, Nunn, 2023). Specifically, because cultural dynamics are a solution to backward-looking difference or differential equations in these models, there is no possibility of discontinuous change. This remains true even when the prevalence of some cultural characteristics respond to future rewards. This contrasts with our approach, which allows for discontinuous jumps as different cultural configurations emerge in new social equilibria. This distinction can be further clarified by contrasting our approach with some well-known ideas in evolutionary biology. We share several of the features emphasized in the notion of *punctuated equilibrium*, proposed by Eldredge and Gould (1972). In punctuated equilibria, as in our conceptual framework, long periods of stability (stasis) are followed by rapid change (e.g., Gould, 2002). However, as emphasized by Dawkins (1986), dynamics in punctuated equilibria are still Darwinian in that they do not happen discontinuously or within a single generation; rather, they follow "descent with modification" (with mutations transmitted across generations). The type of discontinuity emphasized in our approach is thus more similar to theories sometimes referred to as *saltationalism*, for example, associated with the early twentieth-century geneticist Richard Goldschmidt (e.g., Goldschmidt, 1940). Saltational change—truly discontinuous change—is implausible in the case of biological evolution, but feasible, and in fact we would argue quite likely, when it comes to culture. This becomes particularly so once we recognize, following Geertz, that culture is about social meaning, justification and coordination. We argue that the dominant approaches in cultural economics, building on Parsonian and evolutionary foundations, have inadvertently left out these important discontinuous elements.[3]

Our reading of the historical evidence is consistent with the importance of such discontinuous changes. For example, English culture in the 16th and 17th centuries had a number of distinctive characteristics that went back to Anglo-Saxon times and were overlaid with the practices and hierarchies that the Normans brought after their conquest of the isles in 1066. Interpreted through the lenses of our approach, the English culture set was highly stable. However, in the course of the political changes starting in the middle of the 17th century, a new cultural configuration, which we call "*Popular Sovereignty*", emerged swiftly. This cultural configuration, articulated in the writings of the philosopher John Locke, created a sharp break from the prevailing configuration, favored and advocated by Stuart monarchs, such as James II. This configuration, which can be called the "*Divine Right of Kings*", had enshrined a patriarchal hierarchy in which the king is the divinely-anointed sovereign with the right and obligation to rule over his subjects. As economic change and

[3] In his seminal economic history of technology, Mokyr (1990) also emphasizes the possibility of punctuated equilibrium in social dynamics, but he does not extend this to consider discontinuous changes, as we do here.

especially violent political upheavals began to disrupt English institutions, *Popular Sovereignty*, based on many of the same attributes but forged from different connections and interpretations, took hold rapidly in parts of the population. The change was truly saltational, not just because of its speed, but also because of the breadth of its social implications.

The English case also highlights the way in which cultural transformation can be different from biological punctuated equilibrium. Because cultural configurations are about political justifications and the meaning of different attributes, a critical part of the change is via a process of *cultural struggle*, as different groups strive to convince the population of their own interpretation and justifications. This is what we observe in the English case, with different groups appealing to the same underlying notions from the Bible and age-old English traditions, but with diametrically opposed interpretations.

Importantly, we also show that when saltational change takes place in a particular dimension, for example in the context of cultural configurations supporting different political institutions, this opens up possibilities for more pervasive modifications in cultural configurations and cultural changes in other dimensions. In the English case, this is most obvious with religion, but was visible in other aspects of culture too.

*Third*, our approach fundamentally departs from the emphasis of the Parsonian paradigm on the distinctive values of different religions, ethnicities or national cultures (which made Huntington, for example, conclude that South Koreans succeeded economically because of their national cultural values). It does not, however, view cultures (or culture sets in our parlance) as blank slates. The set of attributes available and the constraints on their connections determine how fluid a culture is and this can have important effects on the nature and evolution of cultural configurations.

We emphasize two aspects of culture sets in this context: an attribute can be *abstract* or *specific*, and this determines how easily it can be combined with other attributes. Abstract attributes can play different roles in different configurations and thus generate a larger set of feasible cultural configurations than specific attributes do. Abstract attributes can have very different meanings depending on what other attributes they are combined with—a possibility that is well illustrated by the notion of *The Way* in Confucian culture we mentioned already. We maintain that all cultures are fluid, but some, such as the Indian culture based on the caste system, are less fluid than others, because they are made up of more specific attributes and because attributes have to be interpreted in a way that is consistent with caste hierarchy. As a result, Confucian culture tends to be more fluid than the Indian culture and thus allows more diverse cultural configurations.[4]

Another factor that shapes the fluidity of a culture is whether a collection (subset) of its attributes are *entangled*—as opposed to being *free-standing*. If some attributes are entangled, then their meanings are closely tied, and we suppose that they cannot be separated in cultural

[4] As we discuss later, no society has a truly uniform culture. We use terms like "Confucian" and "Indian" culture as shorthands while recognizing that there is significant heterogeneity within these cultures.

configurations. This means that if one of an entangled set of attributes is linked to an outside attribute, then other entangled attributes have to be linked to this outside attribute as well. For instance, the notion of (spiritual) "pollution" in Indian culture is entangled with caste hierarchy and specific religious rituals, because pollution is defined in conjunction with and cannot be divorced from the subservient nature of the Dalits and other lower castes. Consequently, caste hierarchy and religious rituals cannot be (easily) separated. In contrast, notions related to hierarchy and respect for ancient institutions in English culture are also free-standing and do not need to be always combined with a specific set of other attributes. When key attributes are abstract and free-standing, there will be a richer menu of feasible cultural configurations, greater fluidity and thus more adaptability. In contrast, specific and entangled attributes generate less fluid (more hardwired) cultures.

Importantly, and again in contrast to the Parsonian perspective, fluid cultures are not necessarily "better" cultures. For one, less fluid cultures can sometimes provide greater coordination and mobilization. For another, cultural configurations that change in a fluid way can nonetheless lock in inefficient economic or social arrangements.[5]

*Finally,* our emphasis on the malleability and fluidity of culture and the co-determination of cultural configurations along with political and institutional outcomes amplifies a point that is already present in the recent economics literature on culture. This contrasts with the most rigid Parsonian approach, which tends to suggest that culture is more fundamental than institutions—or as Huntington (2000) emphasizes, quoting from Daniel Etounga-Manguelle, "Culture is the mother; institutions are the children" (p. xxviii). In our approach, as in other recent works in economics discussed next, culture and institutions are more like siblings, each affecting the other. However, distinctly from these contributions, in our theory this interplay happens via cultural struggles and potentially in a much more discontinuous fashion.

## 1.2 A Brief Overview of the Literature

The literature on cultural economics is vast and growing. Most relevant for this essay are a few papers that consider the possibility of rapid cultural change. Our ideas are closest to Acemoglu and Jackson (2015) who model norms in a game-theoretic setting and emphasize the possibility of discontinuous change following periods of stasis or long persistence.[6] Fernández (2011) models

[5]Perhaps the most celebrated contribution to this area is Putnam (1993), who contrasts political cultures, social capital and pro-social attitudes in the north and south of Italy. Putnam (1993, 2000) in turn builds on Banfield's seminal (1958) book on amoral familism in the south of Italy as a cause of economic and political underdevelopment. Recent important contributions along these lines include Ichino and Maggi's (2000) work on misbehavior by workers from different backgrounds working in the same firm in Italy and Tabellini's (2008) model of pro-social cultural values and their interactions with institutions. But see also Butler, Giuliano and Guiso (2016) who argue that trust has a non-monotonic effect on economic outcomes.

[6]This paper is in turn situated in a broader literature conceptualizing norms in the context of either evolutionary game theory models or as Bayesian equilibria of various social interactions. See Schelling (1978), Axelrod (1984),

"culture as learning", which implies that at times cultures can change rapidly.

Several works study the two-way causality between culture and institutions. These include, among others, Alesina and Giuliano (2015), Besley and Persson (2019), Bisin and Verdier (2017), Bisin, Rubin, Seror and Verdier (2021), Doepke and Zilibotti (2008, 2019), Gorodnichenko and Roland (2021), Greif (2006), Mokyr (2016), Spolaore and Wacziarg (2013), Tabellini (2008, 2010), Cheung and Wu (2018) and Giuliano and Nunn (2021). Most of these papers adopt the evolutionary approach of Bisin and Verdier (2000, 2001) and Boyd and Richerson (1988), and thus disallow discontinuous changes in culture. Nor do they share our systems approach and emphasis on cultural struggles and the role of cultural configurations on political legitimization.

Issues of political legitimization arise in the literature on religion and institutions. Botticini and Eckstein (2014) explain key aspects of Judaism by pointing to the demand for education, motivated by the communal pressures for reading the Torah, that emerged in the uncertain environment following the destruction of the Second Temple during the Roman Republic. Becker and Woessman (2009), Cantoni (2015) and Cantoni, Dittmar and Yuchtman (2018), among others, study the interplay between Protestantism, the printing press and education, emphasizing how the Protestant doctrine of reading the Bible to connect personally to God raised the demand for education, and via this channel, affected economic, social and political attitudes. Kuran (2011), Platteau (2017) and Rubin (2017) are even more closely related, since they stress the role of certain attributes of Islam that are, in our terminology, entangled in causing economic and political dysfunction (specifically, the lack of non-religious property rights and inheritance in the first, and aspects of religion-state relations in the latter two studies).

A related subliterature, anticipated by Guiso, Sapienza and Zingales's (2009) use of genetic similarity as an instrument for culture, links national, ethnic and religious cultures to genetic backgrounds. See, for example, Galor and Moav (2002), Ashraf and Galor (2013), Spolaore and Wacziarg (2009), Gorodnichenko and Roland (2017, 2021), as well as outside economics, Nicholas Wade's much-disputed (2014) book. These contributions are distinguished from our work for the same reasons—they view culture as a slowly-changing, coherent set of values at the national, ethnic or religious level.

The empirical literature in this area is growing rapidly as well. Many of the influential papers establish the persistence of some cultural attributes. For example, Fernández and Fogli (2009) show that second-generation immigrant women in the United States have fertility and labor force participation rates correlated with last generation's average rates in their country of origin, while Carroll, Rhee and Rhee (1994) use the same empirical strategy to look at differences in saving

Belloc and Bowles (2013) and Young's (2015) recent survey on the former approach, and Acemoglu and Jackson (2017), Benabou and Tirole (2003, 2011), Bursztyn, Egorov and Fiorin (2020) and Benabou, Ticchi and Vindigni (2021) on the latter. See also Algan and Cahuc's (2010) study of the relationship between inherited trust and economic growth and Besley and Persson's (2019) and Besley's (2020) framework linking culture and trust to political and economic development.

rates. Alesina, Giuliano and Nunn (2013) document the persistence of gender norms depending on the extent to which the plow was adopted historically in agriculture, while Luttmer and Singhal (2011) study the relationship between culture and preferences for redistribution, Giuliano (2007) looks at the likelihood of children cohabiting with their parents, and Guiso, Sapienza and Zingales (2009) link differences in historical trust between European nations to their bilateral trade. Our framework suggests some caution in the interpretation of these results, since our systems approach implies that persistence of individual attributes is consistent with significant change in cultural configurations. Relatedly, Giavazzi, Petkov and Schiantarelli (2019) and Jaschke, Sardoschau and Tabellini (2022) document that, in these settings, there is also substantial cultural change. For example, second-generation immigrant women from different backgrounds have fertility and labor force participation rates that converge toward those of natives in the United States and Germany.

One final comment is that, despite the growing size of this literature, there are some important commonalities that distinguish it from the approach we advocate here. Both the explicitly Parsonian works (such as those of Banfield and Huntington) and the body of research building on evolutionary anthropology concentrate on specific aspects of culture that make them better or worse for economic efficiency (e.g., generalized trust vs. amoral familism, more or less pro-sociality) or for equity (e.g., gender norms), and emphasize the stability or the gradual change of these aspects. Our focus on culture as providing social meaning and justification, and the resulting need for a systems approach and possibility for discontinuous changes, are not shared by this literature. Even in models that allow for cultural change (e.g., in Giuliano and Nunn, 2021, where people can choose a culture other than the inherited tradition), there is no analogue of our systems approach or the possibility of fundamental cultural change taking place at a rate faster than the generational timescale. We also stress that the central role of political factors and cultural struggles in the making of cultural configurations in our framework increases the room for "non-adaptive" changes—whereby configurations inimical to the well-being of large fractions of society emerge and persist—relative to most evolutionary approaches.

### 1.3 Overview of the Rest the Paper

The next section explains our conceptual approach in greater detail, introduces our key concepts, such as attributes and whether they are abstract or specific, and entangled or free-standing. We explain how the exact connections of an attribute to others can alter its meaning, and how this type of cultural change can happen rapidly, and even discontinuously. This section also provides the broad outlines of how politics, institutions and culture co-evolve and why this co-evolution depends on how fluid or hardwired a culture is. In this section, we additionally discuss how the way in which culture matters for economic and political outcomes is more nuanced in our framework than in the more traditional approaches and why cultural persistence should be re-thought in light of

the factors emphasized in our framework. The rest of the paper applies this framework in a number of cases, with the explicit aim of clarifying its constituent parts and how they work.

Section 3 turns to the case of 17th-century England, explaining in detail what the key attributes of English culture were, and how they were initially fused together to bolster absolutist rule. We also explain that these attributes adapted to become the basis of a different cultural configuration that advanced the view that sovereignty rests with the people and that kings can only rule if they are delegated that power by, and remain accountable to, the people. We further document the cultural struggles that were involved in these changes and how they were linked to political factors.

Section 4 focuses on Confucian culture, which provides a telling illustration of our systems approach. We emphasize how the same attributes can be interpreted in different ways, and how this type of reinterpretation of Confucian cultural attributes underpinned the emergence of a democratic culture in Taiwan.[7]

Section 5 draws out some of the implications of our approach. We start with a discussion of the costs of hardwired cultures, using the Indian caste system as an example. We then highlight the potential benefits of hardwired cultures using the emergence of "Big God" religions, such as Christianity and Islam. These religions produced many layers of specificity, as compared to the polytheistic cultures that prevailed before, but also generated cultural configurations much more conducive to state-building, coordination and territorial expansion. We then discuss how some of the benefits of hardwired cultures can later turn into barriers to economic and political development.

Section 6 concludes with several ideas and areas for future research. The Appendix provides a simple mathematical formalization for our notions of cultural configurations produced from constituent attributes and how this approach can represent more fluid and less fluid cultures.

## 2 Culture, Institutions and Social Equilibria: A Framework

Our purpose in this section is to provide a conceptual framework that clarifies how different cultures may affect, facilitate and legitimize certain types of behavior and how they may themselves be transformed rapidly by political forces, institutions and innovations.

Our approach emphasizes three aspects of cultures, already highlighted by our definition in the Introduction: (1) they attempt to provide "meaning" or a framework for interpreting diverse situations (e.g., as religions do); (2) they coordinate expectations and behavior within a group and thus enable certain actions that may not have been possible otherwise; (3) they encourage and facilitate certain behaviors, while discouraging others (e.g., try to prevent violence, theft, adultery or usury).

We explain how these aspects of culture form, building on notions of cultural attributes and

[7] Hong Kong is similar in many respects but the 200 years of European colonialism makes it a more complicated case.

the culture set. We then embed these ideas in a more dynamic framework, which emphasizes the role of political factors, the potential for discontinuous changes in cultural configuration, and the process of cultural struggles. Throughout, our objective is to introduce the main ideas, and we adopt an informal approach. We provide a modicum of formalism in the Appendix, clarifying some of the key terms mathematically.

### 2.1 Elements of a Systems Approach: Culture Sets, Attributes and Possibilities

Cultures consist of a set of interlinked (cultural) *attributes*. Attributes could be such things as the type of social hierarchy (patriarchy, gerontocracy, meritocracy); the identity of "in-groups"; the meaning, definition and importance of virtue; the structure of social responsibilities; the role of honor and violence in conflict resolution; respect for ancient customs and traditions; the extent of segregation and mixing between different types of people; family structure; certain rituals; religious precepts; regulation of sexual behavior; the role of higher ideals; etc. Some cultures specify a social hierarchy based on age and enshrine various responsibilities of younger and older individuals. This could then be combined with a lineage identity or nuclear family, in each case with varying degrees of control over sexual reproduction and extramarital affairs. It can be further fused with a religious or national identity, or sometimes both. Another culture may specify a caste-based social hierarchy, cementing this hierarchy with onerous responsibilities for some groups. Or it can replace the national identity with one defined by ethnicity, religion, or ancestors (e.g., as in segmentary lineage societies). These diverse notions can be represented by different attributes.

Crucially, however, most cultures do not just specify a single meaning to each attribute. The meaning of an attribute depends on how it is linked to other attributes. We capture this using the set of *feasible connections* (between attributes) and presume that the meaning of an attribute is determined by what others it is combined with (or more precisely, by the exact set of connections). A *culture set* comprises cultural attributes and the feasible connections between them.[8] Elements of a culture set thus correspond to (feasible) *cultural configurations*. Each cultural configuration provides a different social meaning and interpretation, and potentially justifies and coordinates different types of social behavior, thus capturing the essence of our definition of culture. For instance, a cultural configuration that puts the notion of social hierarchy at its centerpiece and maintains that any two individuals in society can be ranked in terms of status, and the low-status individual has to obey and respect the high-status one will tend to support political institutions that sustain and rely on a rigid hierarchy.

Figure 1 provides a simple example with four attributes. In light gray, we show all the logically

[8]Dynamically, there is an important distinction between a culture and its culture set. A culture can evolve over time by adding new attributes, dropping some existing ones, or by modifying the set of feasible connections. Thus, a culture should be thought of as a collection of "admissible" culture sets (meaning the collection of culture sets that can still be consistent with the culture in question). For the analysis and discussion of this paper, however, we fix the culture set in question, and thus with a slight abuse of terminology, we use culture and culture set interchangeably.

possible connections between these four attributes. An actual culture set may not include all of these connections, and only a subset of them may be feasibale. For instance, a given culture set may allow only the two cultural configurations shown in red and blue.[9]

Let us illustrate how different connections lead to different meanings of an attribute and thus different justifications in a cultural configuration using an example. Consider a situation where one attribute represents social hierarchy, another obedience and a third virtue. If hierarchy was linked to obedience in a cultural configuration then hierarchy might mean that rulers have to be obeyed all the time. On the other hand, if instead hierarchy was linked to virtue, it could mean that rulers have to be obeyed when they are virtuous, but not otherwise. Such a culture may allow for disobedience to an un-virtuous ruler, as we will emphasize in the context of our discussion of virtue and *The Way* in Confucian culture. We thus see in this instance how the same attribute is playing distinct roles in different contexts, with very different meanings.

It is also worth observing that many cultures have numerous attributes, perhaps in part because they have evolved over time with the blending of different cultures and civilizations. For instance, the post-7th century Arabian Peninsula combined pre-Islamic tribal customs and attributes with the basic tenets of Islam. We envisage only a subset of possible connections being feasible precisely because in such situations not all attributes are mutually compatible: the pre-Islamic emphasis on kin-based order could not be easily fused with Mohammed's efforts to supplant kin relations, which were enshrined in the Quran and the Hadith. This illustrates how the nature of a culture also depends on the collection of feasible connections. Finally, note also that two societies may have different cultural configurations because they have different attributes or because they have the same attributes but they have combined them differently.

Swidler's discussion illustrates how the same attributes combined differently generate distinct meanings. In her own words: "The middle-class Americans I interviewed draw from a common-pool of cultural resources. What differentiates them is how they make use of the culture they have available" (2003, p. 5).

## 2.2 Cultural Configurations and Saltational Change

Our discussion highlights that a culture is not the same as the current cultural configuration. There are typically a multitude of feasible cultural configurations, which can be obtained by connecting existing attributes differently. Which one of these possibilities emerges is endogenously determined,

[9] A couple of clarifications are useful at this point. First, we think of attributes that are not part of (disconnected from) a cultural configuration as still being present and playing a role in other domains. But they are not providing a critical justification or meaning in the context of the prevailing configuration. For example, some attributes may be important in giving meaning to gender relations, but may not have a central impact on the political equilibrium, which is our main focus. Hence, throughout, the attributes (vertices) are always fixed, but what other attributes they are connected to varies. Second, we use the terms connections, combinations, fusings and wirings of attributes interchangeably.

and attributes can be connected and reconnected rapidly, altering their meanings, cultural change can happen *discontinuously*—or in a *saltational* manner—as we described in the Introduction.

For example, an attribute related to hierarchy does not necessarily specify the identity of how high or low status are determined. Hence, modifying the connections of this attribute could change the definition of hierarchy, say switching from a basis in gerontocracy (the old are high status) to one founded on plutocracy (the wealthy are high status). Anticipating our discussion of Confucian culture, if a culture were to emphasize the importance of individuals voluntarily submitting their will to a virtuous ruler, then feasible cultural configurations may legitimize either an absolutist monarchy (where the ruler is presumed to be virtuous by default) or more democratic political institutions (where rulers are appointed according to their presumed skills or virtue, and can be deposed if they do not perform well).

It is also useful at this point to observe that we think of *norms* not as an attribute but as part of cultural configurations. For example, the configuration of the *Divine Right of Kings* may include the social norm that everyone has to bow before the king. A culture can support different norms, for example, about whether individual success is valued (and what counts as "success"), whether marriages should be based on love, whether extramarital sex is tolerated, how important is honesty, and how rivals and adversaries should be treated. Even more importantly, the same culture set can generate varying political norms and support distinct political institutions—for instance, concerning whether corruption is accepted, how closely laws should be obeyed, or whether sovereignty rests in rulers or the people.

### 2.3 Fluid Cultures

A critical notion for our discussion is the *fluidity* of a culture. We say that a culture (or a culture set) is *more fluid* than another, if it allows a greater set of cultural configurations. Conversely, a culture is *more hardwired* if it allows fewer cultural configurations. In terms of our representation of cultural configurations as graphs, this implies that a fluid culture contains more feasible combinations of attributes.[10] For example, in Figure 1, a culture set that only permits the cultural configuration shown in red is less fluid than another culture set that allows both the red and the blue ones. Most cultures are non-comparable—of two cultures being considered, neither may be strictly more fluid than another. Nevertheless, the notion of fluidity is useful, because it enables us to think *counterfactually*, asking questions such as: What is the role of cultural configurations in explaining economic and political divergences? Or how would various economic and political outcomes have differed if a culture had been more fluid?

[10] A culture set that allows several cultural configurations, but with each corresponding to only minor variations on the others, may not be much more fluid than one that does not; alternatively, a culture set that allows only a few cultural configurations, but with each offering very different meanings, can be viewed as fluid. These different meanings may then support very different institutions. See the Appendix.

Because cultures, and cultural configurations, justify and legitimize different behaviors, they may preclude (or conversely encourage) certain economic, social and political arrangements. Our discussion so far makes it clear that a more hardwired culture will rule out more (and rule in fewer) arrangements. To illustrate the implications of this observation, let us consider the hypothetical case of an *extreme hardwired culture*, which only enables a unique cultural configuration. An extreme hardwired culture that, say, categorically bans any type of financial transactions will preclude economic arrangements based on financial markets. However, for less hardwired cultures, there may be adaptations to take advantage of financial transactions. For example, even though usury was regarded as exploitative in Christianity, the broader fluidity of the culture of which Christianity was a part ultimately allowed a rich array of financial innovations and transactions.

Similar conclusions apply when we consider political arrangements. A hardwired culture might specify that authority is always given by God to a chosen leader. This may preclude political organizations that are not strictly hierarchical and may rule in only a monarchy or a theocracy as permissible political regimes. But many cultures, such as Confucianism, are much more fluid than that, and allow both highly hierarchical regimes and more democratic alternatives.

For most of the discussion in the current paper, we focus on a cultural configuration prevailing among the members of a well-defined group. But this is clearly a simplification. A fluid culture that allows different cultural configurations over time also generates different meanings and interpretations among members of the group *at a given point in time* and in a given location. Hence, fluid cultures will generate some degree of within-group cultural discordance (consistent with Swidler's, 2003, emphasis on cultural incoherence). Though this is not our focus here, it does have an important implication we return to later: achieving coordination among group members may be more difficult in the case of fluid cultures, because different subgroups may have different interpretations and expectations. This is one of the reasons why, as we discuss in Section 5, hardwired cultures are very different from the broadly shared conceptualization of "bad cultures" in work by Banfield, Putnam, and Huntington—hardwiring may be effective in achieving successful coordination in the short run, potentially with big economic payoffs under certain conditions, but it may sometimes reduce adaptability to evolving circumstances.

### 2.4 Culture, Politics and Institutions

How does a society end up in a cultural configuration? The answer to this question constitutes a central part of our conceptual framework. We argue that the prevailing cultural configuration determined using (cultural) attributes in the culture set, as well as the way that this configuration came together, may be influenced by history (past cultural configurations), institutions (in particular, institutional arrangements that shape and regulate economic and political power) and "politics", meaning the ability of certain groups of individuals to form coalitions, come up with

new ideas and innovations, and exercise power.[11]

Though there is much theory to be developed about how various factors, political and otherwise, shape which cultural cultural configurations are chosen, in the rest of this essay, we focus on specific examples to illustrate the main ideas. Before doing this, we discuss the dynamics of cultural configurations, why institutions persist and what makes cultures more or less fluid.

To represent the dynamics of cultural configurations, we follow the approach in Acemoglu, Johnson and Robinson (2005a), and distinguish "state variables", which are predetermined at a given point in time but can evolve over time, from "equilibrium/flow variables", which are determined at that point. We view cultural configurations as a state variable, in the same way as we think of institutions as a state variable, but crucially, we now emphasize that both cultural configurations and institutions can exhibit discontinuous change. This change is not independent of where the system starts—hence existing institutions and cultural configurations structure which types of gradual and abrupt responses are feasible.

On the other hand, economic outcomes, including the distribution of resources and the growth performance of an economy, and various social outcomes, such as who has high status, are equilibrium variables. For this reason, we refer to their joint determination as a "social equilibrium".[12]

There are several points that are central to our framework, which we now explain by means of Figures 2 and 3. First, cultural configurations themselves are produced from a culture set. Hence, in both Figures 2 and 3, we see the culture set at the top, influencing cultural configurations. For our focus in these two figures, we take this culture set to be given and unchanging.

Second, we have two other blocks in these two figures: institutions and politics, by which we mean the distribution of *de jure* and *de facto* political power that often enables some groups to impact institutions and other social arrangements (see Acemoglu, Johnson and Robinson, 2005a).[13]

Third, the two figures together draw a central distinction. In Figure 2, as an expositional device, we consider the hypothetical extreme hardwired culture, where there is only a single cultural configuration. Because there is only a unique feasible cultural configuration, the realized cultural configuration is unchanging (and hence not indexed by t). This case then captures the ideas of culturalists such as Huntington, Banfield and their followers, including the statement that "culture

[11] We follow the definition of "institutions" provided in Acemoglu, Johnson and Robinson (2005a), thus combining political and economic institutions. Political institutions include such things as the constitution, the electoral system, political regime, laws relevant for political participation, assembly and civil rights. For the purposes here they can include certain political norms as well. Economic institutions include commercial laws, property rights, contracting institutions, and such.

[12] There are of course some gray areas. Norms can be viewed as partly determined with current expectations and behaviors, but are persistent and condition what types of cultural configurations and institutions are feasible, and thus are partly state variables as well. But as noted above, in this discussion, we fold norms into cultural configurations.

[13] See Acemoglu, Johnson and Robinson, (2005a) for the definitions of *de jure* and *de facto* power.

Factors other than politics, such as demographic shocks or major changes in economic conditions, matter as well (see Acemoglu and Robinson, 2012). We focus on politics, because it plays a more important role in our historical case studies below and also because we do not want to include too many items in the figure.

is the mother; institutions are the children". As a result, politics may impact institutions (for example, when there is a civil war). Yet, crucially, institutions and politics themselves do not impact the cultural configuration.

Real-world cultures, on the other hand, allow for much greater fluidity than in Figure 2, and this is the case we depict in Figure 3. Now there are multitudes of cultural configurations that can be produced from the same culture set, and these can support distinct institutions. This opens the way to the central role of politics and the two-way interactions between cultural configurations and institutions. Politics, in particular, directly affects institutions and the evolution of cultural configurations, and institutions, as a critical state variable, shape cultural configurations as well (highlighted by the red arrows in the figure). Politics can change culture from the top (for example during the rule of the Nazi Party in Germany), or from the bottom (for example the way that the U.S. Civil Rights movement led to changes in attitudes towards African Americans). Culture can also change autonomously as when cultural entrepreneurs propose new connections between attributes and give new meaning to cultural configurations.

As we discuss later in the context of 17th-century England, John Locke developed a political philosophy based on a new cultural configuration that provided a powerful argument for the illegitimacy of the government of James II. This contributed to both cultural and political change during the Glorious Revolution. Though his focus was on politics, key elements of his philosophy spread into many other parts of culture, particularly his emphasis on the need for toleration and his views about the origins of private property rights. The important point emphasized by Figure 3 in this context is that there are major two-way interactions between cultural configurations and institutions, so existing political legitimizations and acceptable ideas determine which types of institutions are feasible, and existing institutions structure how political power shifts, which then influences the evolution of cultural configurations. Moreover, saltational change in cultural configurations opens the way to discontinuous institutional transformations.

Cultural change induced by political factors can be rapid and even discontinuous, because it takes place by recombining existing attributes, especially when the culture set is sufficiently fluid to allow such rearrangements. This potential role of the culture set is communicated in the figure by the black arrows emanating from the culture set and influencing cultural configurations.

Finally, the light green arrow from today's cultural configuration to tomorrow's configuration represents both any persistence in cultural configuration and the potential for cultural struggles. Specifically, cultural change takes place by means of an alternative configuration and on its interpretations gaining adherents. This process depends on existing views and legitimizations, as summarized by the current cultural configuration.

In sum, we argue that only the most extreme hardwired cultures look like what is depicted in Figure 2. The real world, instead, resembles Figure 3, as suggested by our discussion of the rich

set of cultural configurations in the English and Chinese cases and how societies often seamlessly transition from one cultural configuration to another in response to evolving political and other conditions,. This potential fluidity of culture, even though they are produced from the same underlying culture set, is the leitmotif of our theory.

### 2.5 Abstract vs Specific Attributes

Why are some cultures more fluid than others? Our conceptual framework emphasizes two factors, one related to the nature of the attributes, and the other to the collection of feasible connections. For the first, we distinguish between "abstract" and "specific" attributes. By *abstract*, we mean that an attribute that has multiple meanings. In terms of our graphical/network representation, this can be captured by allowing abstract attributes to have more feasible links. Confucian notions of virtue and the English interpretations of Christian teachings are examples of abstract attributes that can mean different things in different contexts. So, English Christianity gained a different meaning, with distinct implications for political institutions, when combined with notions of hierarchy than when fused with notions of the ancient constitution emphasizing political participation by regular people.

In contrast, a *specific* attribute has fewer connections, because it can be combined with fewer other attributes.[14] As an example, consider the idea of "pollution" generated by Dalits and other lower castes in the Indian caste system. In our conceptualization, this is a highly specific attribute related to caste hierarchy, as it has a definite meaning, and cannot be easily combined with attributes that are against this hierarchy.

These ideas are illustrated in Figure 4. In Panel (a), the top-left attribute is shown as being connected to all three other attributes (these are shown in different colors, representing the fact that these are feasible connections). In Panel (b), there is only one feasible connection for the top-left attribute (and in this comparison we are holding all other feasible connections fixed).

### 2.6 Entangled vs Free-Standing Attributes

Another important property of attributes is whether they are entangled or free-standing. While being abstract or specific is a property of an attribute, entanglement is a property of a collection of attributes, and directly impacts the set of feasible connections and cultural configurations. We say that a collection of attributes is *entangled* if the function or meaning of each attribute is tightly linked to those of the others in the collection. This limits how these attributes can be combined with others outside of the collection and makes it impossible for them to be separated from each other. Formally, if two attributes are entangled, then they have to have exactly the same connections,

[14] In reality, there are degrees of abstractness and specificity. For example, an attribute can be more abstract than another if it allows more connections. We simplify the discussion by contrasting abstract and specific attributes whenever this causes no confusion.

and this eliminates configurations that would have separated these attributes. In contrast, a *free-standing* collection consists of attributes that have meanings and functions that are independent and can thus be wired separately from each other.

These notions are illustrated in Figure 5, where there are again four attributes and the top two are entangled as indicated by the red bubble connecting them. Panel (a) shows a feasible configuration, where these two attributes have exactly the same connections. Panel (b), on the other hand, shows a configuration that is disallowed when these two top attributes are entangled—because they have different connections.

Returning to the English case, religion was a central part of medieval culture as elsewhere in Europe, but Catholicism was not entangled with other key attributes, and this, in our interpretation, is the reason why it could be abandoned, banned and prosecuted, as Henry VIII and Elizabeth I did. Moreover, while this allowed for Catholics to be treated in particular ways, for example differentially taxed, it also made feasible their rehabilitated with the Catholic Emancipation Act of 1829. In contrast, the Islamic culture provides an example where a greater set of attributes were entangled with attributes which in England were not outside of the domain of religion. In the case of taxation, for example, differential taxation of non-Muslims was specified in the Quran. This entanglement makes modifications similar to the Catholic Emancipation Act more difficult.

In our framework, because entangled collections of attributes cannot be separated and linked to different attributes (outside of this collection), entanglement is associated with fewer resulting connections and thus a smaller set of feasible cultural configurations.

## 2.7 Cultural Possibilities and Off-Diagonal Configurations

We can now recap our discussion in the previous two subsections in terms of the next table, summarizing where fluid and hardwired cultures come from.

| | abstract | specific |
|---|---|---|
| free-standing | **fluid culture** | intermediate culture |
| entangled | intermediate culture | **hardwired culture** |

The English culture, which has several key abstract attributes that are also free-standing, creates a fairly fluid culture, while the Islamic one, with its specific and entangled attributes, is a less fluid (more hardwired) culture. The table simplifies the presentation by referring to fluid and hardwired cultures, though it should be remembered that these are always a matter of degree.

There are natural reasons why abstract attributes are also more likely to be free-standing. If something is abstract, then it is less likely to have an interpretation that is closely tied to the presence or meaning of other attributes. Likewise, it is easier to see specific attributes become entangled with each other. Hence, the English case provides an example of a fluid culture: it has both abstract and free-standing attributes at its core and these properties are symbiotic and support

each other. The caste system provides an example of a relatively hardwired culture, because its attributes are both entangled (as argued in the Introduction) and specific (as argued earlier in this section). Nevertheless, entanglement and specificity are conceptually distinct and do not always travel together.

As our term for them suggests, intermediate cultures occupy a middling ground in our conceptual framework. They are not very fluid, but they have important elements of fluidity because some of their key attributes are either free-standing or abstract.[15] An example of an intermediate culture with entangled but abstract attributes is provided by those of several African peoples. Some of the key attributes of these cultures, such as egalitarian political notions and witchcraft, are highly abstract, and are frequently repurposed and applied in very different contexts (Acemoglu and Robinson, 2019). Witchcraft allegations were often leveled against elites to limit their power, but in some conflictual situations, they were also turned against minorities. Witchcraft accusations are sometimes triggered by individual setbacks (e.g., illness, economic failure), but at other times, they are used in the context of specific political aims (e.g., against chiefs). Put differently, what is viewed as witchcraft changes quite significantly depending on context and circumstances.

In contrast, an important set of medieval attributes in Europe centered on anti-Jewish beliefs and customs. These attributes were, by definition, very specific, as it would not be easy to turn anti-Jewish beliefs into a weapon against Catholics. Nevertheless, they were free-standing, and were not entangled with other customs and cultural elements. This is one of the reasons why they could be largely put aside, even if not completely eliminated, after Napoleonic reforms in continental Europe (see Acemogu, Cantoni, Johnson and Robinson, 2011).

### 2.8 Systems Approach at Work: Cultural Persistence

Now that we have the main elements of our conceptual framework, we can use it to clarify how culture persists and influences economic and political outcomes. Let us go back to Figure 3, which represents the general case of interactions between culture and institutions. One idea that is made evident by Figure 3 (especially in comparison to Figure 2) is that a more hardwired culture is more likely to matter—meaning having a determinate impact on outcomes, along the lines of the arguments made by many leading cultural economists and political scientists. Because hardwired cultures allow fewer cultural configurations, a given configuration is more likely to become a "hard constraint" on institutions and social outcomes. In contrast, for the most fluid cultures, though the culture set will influence politics and institutions as in Figure 3, a given cultural configuration is unlikely to be a major constraint on social equilibria. When political factors change—for example,

[15] We do not mean to suggest that a culture that has some entangled attributes will necessarily be less fluid than another without such entanglement. It is a question of degree that depends on how rich the set of attributes is and how abstract the attributes themselves are. For this reason, we will argue that the Chinese culture, which has some entangled elements but whose main attributes are highly abstract, is no less fluid than the English culture, whose main attributes are both free-standing and abstract. See Sections 3 and 4.

when power shifts from one group to another—a new cultural configuration is likely to emerge swiftly, as captured by our emphasis on saltational change. Here, our systems approach plays an important role as well. Changes in cultural configurations are likely to be more rapid when existing attributes can alter their connections and meanings in response to other social and political changes.

The same systems perspective also sheds light on the nature of cultural persistence. In the Parsonian view, cultures, as coherent and fairly stable social constructs, tend to persist almost by definition. Viewed from this perspective, the recurrence of some specific customs (certain rituals, tastes, specific linguistic features or behaviors) are viewed as evidence of cultural persistence or even the very slow-changing nature of culture (Roland, 2004). The systems approach leads to two more nuanced interpretations. First, the persistence of some elements of a culture set does not imply "cultural persistence" in the sense of an enduring cultural constraint on political and economic outcomes. For instance, many elements of Confucian culture have been present for 2,500 years. Yet this does not imply that cultural configurations are unchanging. Second, viewed in this light, if a cultural configuration persists, this may be evidence of a social equilibrium in which this cultural configuration is not a binding constraint and any persistence of social equilibria is rooted in other factors. In Section 4, we argue that the persistence of autocratic institutions was not the indelible consequence of an autocratic Chinese culture, but rather, an autocratic cultural configuration was likely selected by the prevailing power dynamics as a way of further legitimizing imperial political institutions.

### 2.9 Cultural Struggles and Saltational Change

How does a society switch from one cultural configuration to another? To explore potential answers to these questions, we need to recognize that the choice of cultural configuration has both an individual and a collective aspect.[16] If a particular attribute, say Christian teachings, has multiple potential meanings, then an individual, depending on his or her social status and economic choices, may adopt one of those meanings. These choices may also be influenced by the individual's community and family (Sewell, 2005). These individual-level dynamics are important, especially for determining the scope for coordination and certain basic norms in the society.

Our focus, however, is more with the collective aspect. Here, three dynamics may be particularly important. The first is "cultural entrepreneurship". Often, new possible cultural configurations need to be articulated by some individuals and often require certain "innovations". In the English case, which we discuss next, philosophers such as Thomas Hobbes (1996), John Locke (2003) and Sir Edward Coke, as well as groups such as the Levellers, played this role by developing and popularizing

[16] One dimension of our conceptual framework that needs a much greater level of modeling and specification is how cultural configurations change in practice—for example, whose decisions matter directly and indirectly, and how these strategies are chosen. The reason why we leave this aspect of the framework loose is both for simplicity and also because the exact game-theoretic interactions vary across settings and institutions (e.g., democracy versus non-democracy or the degree to which there are collective choices based on learning and diffusion of ideas).

an alternative to the prevailing configuration that favored absolutist rule (see also Mokyr, 2016, for a broader interpretation of cultural entrepreneurship). Second, there is typically a struggle between different cultural configurations, often led by cultural entrepreneurs and political factions, for example, as in 17th-century England, which we discuss in the next section. The result of this struggle depends on many factors, including social and political dynamics as well as the plausibility and other attractive features of the worldview implied by the different cultural configurations. Third, cultural struggles also feed into saltational change. In particular, episodic political changes, for instance, resulting from shifts in the balance of power, can pave the way to rapid reconnections of existing attributes and thus to radical cultural change, as argued in the next section.

# 3 The Evolution of English Culture

We now introduce a specific example of a culture set, that of 17th-century England. This set had a fairly uniform collection of attributes throughout the territories that now make up England. Underdown notes "English people of all regions and types of communities had much in common, and shared many assumptions about church and state, family and locality" (1985, pp. 44-45). However, we will see that different people and groups interpreted and combined these attributes in different ways and that this paved the way to the very rapid emergence of a new cultural configuration, emphasizing "*Popular Sovereignty*", which was diametrically opposed to the prevailing hierarchical configuration, the "*Divine Right of Kings*". This new configuration brought fairly broad social and religious changes in England and motivated the parliamentarian side in the English Civil War and later the Glorious Revolution. We will also see that this transition took place in the context of major shifts in political power and as a result of a process of cultural struggle.

## 3.1 The English Culture Set

By the 17th century, there was a clearly identifiable and broadly shared set of (cultural) attributes among the English, which had evolved over time, combining elements from the pre-Norman Anglo-Saxon epoch with Norman feudal institutions and interpretations of Christian doctrine. This culture set had many elements that were not directly related to political institutions and philosophy, and here we focus on the subset of attributes relevant to social hierarchy and political order.

As elsewhere in early modern Europe, religion was central to English culture, and Englishmen and women believed that God had created a set of *natural laws*, which determined what was right and wrong and how society should be governed. As Laslett (2000, p. 71) explains: "our ancestors were literal believers, all of the time". The simplest version of such laws were the *Ten Commandments*, but usually they extended far beyond this. These beliefs impacted every aspect of English life in the 17th century, and most importantly for our focus, they shaped what the English people viewed as politically and socially legitimate. Although everybody looked to the

Bible for these teachings, this afforded a rich set of interpretations depending on which passages from the Bible or which parts of Jesus's life and pronouncements were emphasized, making them a good exemplar of abstract attributes in our framework. *Religion* in Figure 6 therefore was open to different interpretations and meanings depending on how it was wired to other attributes.[17]

England was indupitably a hierarchical society in the 17th century. There was a clear distinction between aristocrats with their titles and different ranks, and non-aristocrats. Gregory King in his 1688 "Social Table" distinguished between those he claimed increased the "wealth of the kingdom" such as the 800 Barons, 600 Knights and 3,000 Esquires, and those who decreased the wealth, which included 364,000 Laboring People and Out Servants and 400,000 Cottagers and Paupers (Laslett, 2000, pp. 32-33). Aristocrats even had specific forms of address. An Earl had to be addressed as "My Lord", while a Baron was "Your Lordship". Hierarchy extended not just to the relationships between the nobles and the rest, but permeated every aspect of society, including the family. A yeoman, a relatively well off farmer, was "Goodman", while Laslett (2000, p. 38) records the required form of address for a "Craftsman, Tradesman or Artificer" as "None". We capture these elements with the attribute *hierarchy*, which is also a highly abstract one, because whether wealth, title, age or other features was the basis of hierarchy was determined by context.

Hierarchy was naturally related to another key aspect of English society, *paternalism/deference* which Wrightson (2015) defines as "reciprocity in unequal relations" based on "permanent inequalities ... and the recognition of the power of one party and the dependence of the other" (p. 57). Wrightson also emphasizes a quite opposed attribute, "neighborliness" which "implied a degree of equality and mutuality" in local communities. This applied "irrespective of distinctions of wealth or social standing" (2015, p. 51). We therefore include the attribute *neighborliness*.

Another key attribute of the English culture set was *nuclear family*. There is no consensus in the literature on when broader kin relations became relaxed and family obligations started centering around the nuclear family. Some, like Macfarlane (1978), argue that this had been in place at least since the 10th century. In the words of Laslett (2000, p. 19): "England was an association between the heads of such families". Though what *nuclear family* means is very clear, how it integrated with notions of hierarchy was actually variegated, making this a fairly abstract attribute too, in the sense of allowing connections to all other attributes.

Notions of legitimate governance in 17th-century England went back not just to the Bible but also to Anglo-Saxon times. These emphasized the participatory institutions and norms, which Wickham calls "assembly politics", inherited from Germanic tribes, such as the *Witan* (see Maddicott, 2012, Wickham, 2016, Acemoglu and Robinson, 2019). Although English institutions were reshaped by the feudal order imposed by the Normans after 1066, ideas about the legitimacy of these types of participatory modes of governance survived almost everywhere, often in the common

[17] To keep things simple, in Figure 6 and subsequent figures we only depict the attributes and particular configurations rather than the whole set of feasible connections between attributes.

law, and were highly visible in local politics throughout the intervening 600 years (e.g., Hindle, 2000). The 15th-century scholar Sir John Fortescue argued that the common law of England had survived as was often said since 'time out of mind' or since 'time immemorial', and "The kingdom of England was first inhabited by Britons, then ruled by Romans, then again by Britons and then it was possessed by Saxons, but finally by Normans ... And throughout this period, the realm has been continuously regulated by the same customs as it is now" (Fortescue, 1997, p. 26). Although these notions were everywhere in 17th-century England, in the context of politics they were often invoked under the rubric of "The Ancient Constitution" (see Burgess, 1992, Part I). They are clearly visible in important documents such as the Magna Carta of 1215 and in the pushback that centralizing efforts by monarchs such as Henry II encountered (see Acemoglu and Robinson, 2019). We represent these ideas under the *Ancient Constitution* attribute in Figure 6.

This attribute also represented the notion that in England there were customs that were "above both prince and people" (Sommerville, 1999, p. 83). The nature of this attribute makes it clear that it also had a highly malleable meaning, though it would have been difficult to justify absolutist rule with this attribute. In particular, Somerville explains that, according to these ideas, "Parliament's decrees were inferior not only to those of God and nature, but also to the fundamental precepts of the common law" (1999, p. 95). It was generally accepted that the common law had not been enacted by a sovereign and it constrained him and empowered the people. For instance, it implied that the sovereign could not "impose tallages and other burdens without consulting them [the people]" (Fortescue, 1997, p. 17). This, in particular, meant no taxation without representation. Sir Edward Coke, the greatest common lawyer of the era of James I, summed it up in 1610 (Tanner, 1930, p. 188) : "the King hath no prerogative but that which the law of the land allows him."

Another related attribute, which following Thompson (1971) we call *moral economy*, recognized the right of the poor to be "able to live", and if they could not, they had the right to riot and seize food and "The ... natural justice of their cause was widely acknowledged even by the authorities" (Laslett, 2000, p. 149). By its nature, this attribute was also fairly abstract, with a malleable and often changing meaning.

A final attribute is a basic element of every human society: the *in-group* and the *out-group*, typically intersecting with notions of hierarchy and privilege. This would turn out to be important, for example, in whether the in-group included all of the English people, also the Scots and the Welsh, and in issues of how Catholics would be treated after the Reformation and how different types of Protestant denominations would be regarded in the civil war.[18]

[18] Of course, one could identify many other attributes. Identity was based not on kinship, but on residential location, notably a village and possibly a parish. Drinking, especially as social bonding, was important at least since the 14th century as recounted in *The Canterbury Tales*, and probably much earlier. In the 17th century, England was still predominantly rural and agrarian with common institutions such as the open field system. This system involved a lot of cooperation when planting or harvesting took place, and local society had elaborate rules of governance for this and for deciding who had access to other resources like the commons (see Heldring, Robinson and Vollmer, 2022). We

We think of these attributes as being abstract so that all of the possible edges between these attributes are feasible (though these feasible connections are not shown in Figure 6). Moreover, we treat the English attributes as free-standing. *Religion* could easily be fused with *Ancient Constitution* and the *moral economy*; *nuclear family* was entirely consistent with all other attributes; and even *hierarchy* and *property rights* could be seamlessly combined with both top-down and bottom–up conceptions of order in society.

### 3.2 English Cultural Configurations

The basic attributes of the English culture set could be wired together in different ways to explain different aspects of society. For example, the *nuclear family* in this period is typically described as "patriarchal", which was an important part of the 17th-century English cultural configuration (Laslett, 2000, p. 76, Wrightson, 2015, Chapter 4). Though this is not our focus, we note that this patriarchy can be understood as a product of the *nuclear family*, *religious teachings* and *hierarchy* attributes being fused together which generated a clear hierarchy within the most basic unit of society. Another example is the way in which the *in-group* attribute can be fused together with others to generate various forms of social status hierarchies. We do not dwell on these for brevity, and instead turn to how these attributes were combined to generate two cultural configurations supporting the two most important political movements and philosophies of the time.

#### The Divine Right of Kings

The political institutions proposed and propagated by the Stuart kings James I and his son Charles I were based on a particular view of the world, which we summarize by the term the *Divine Right of Kings*. According to this doctrine, the Bible's natural law determined the proper order of the world and God's subjects had to obey and work to advance it. Within this order, the king had been given the power to rule by God, was above all other humans. One of the most eloquent defenders of this view was the philosopher Sir Robert Filmer (1991, p. 35), who argued: "For as kingly power is by the law of God, so it hath no inferior law to limit it". The king was subject to God's laws and it was not the place of people to hold him to account. This philosophy naturally legitimized absolutist political institutions that concentrated all political power in the hands of the monarch.[19]

In Figure 6, we interpret the *Divine Right of Kings* as being produced from a combination of four attributes tightly linked together: *religion, nuclear family, hierarchy* and *paternalism/deference.* As noted above, these jointly generate *patriarchy*, as Sir Robert Filmer clearly understood in his book with the telling title, *Patriarcha*. The first chapter is entitled "That the first kings were

do not introduce these attributes and many others one could add to the list, since we do not think they are critical given our focus on political institutions.

[19]Decades before Filmer, the Frenchman Jean Bodin had developed a theory of absolutism based on the same notions, stating: "there is nothing greater on earth, after God, than sovereign princes, and since they have been established by Him as His lieutenants for commanding other men" (Bodin, 1992, p. 46).

fathers of families", followed by others with titles such as: "It is unnatural for the people to govern or choose governors". Filmer argued that "men are born in subjection to their parents", and "The father of a family governs by no other law than by his own will, not by the wills of his sons or servants. There is no nation that allows children any action or remedy for being unjustly governed; yet for all this every father is bound by the law of nature" (Filmer, 1991, p. 35). From this it was a short step to associate the king with the father. Filmer's argument started with Adam in the Garden of Eden; "I see not then how the children of Adam ... can be free from subjection to their parents. And this subjection of children is the only fountain of all regal authority, by the ordination of God himself" (p. 7).

King James I, in developing his absolutist political project, proposed this patriarchal vision of monarchical authority. As he told Parliament in 1610, "As for the father of a family they had of old under the Law of Nature fatherly power, which was the power of life and death, over their children or family" (1994, p. 182). Here James is following Filmer in erecting the *Divine Right of Kings* on the foundations going back to natural laws from God. These ideas combined to form a coherent doctrine in support of absolutism.

This cultural configuration thus leant itself to a hierarchical interpretation of religion, akin to the Catholic Church. The Stuarts favored a powerful Anglican Church, controlled by them, with the Book of Common prayer and many rituals and celebrations, converging towards a type of crypto-Catholicism.

It is also worth noting that this cultural configuration did not borrow many important ideas from either the *Ancient Constitution* or the *moral economy*, even if these were clearly recognized parts of English culture at the time. We also do not connect it to the *in-group* attribute, since the exact identity of the in-group does not appear to be central in this context. For example, Tudor and Stuart monarchs had different conceptions of the in-group (including about the treatment of the Catholics), while attempting to build similarly proto-absolutist institutions. Nevertheless, we included the *in-group* attribute in our discussion, because this attribute was very important in other domains (e.g., in the context of discrimination against Jews or at times Catholics in social life) and thus highlights that the same attributes play varying roles in different domains.

**Popular Sovereignty**

Highlighting both the importance of our systems approach and the fluid nature of English culture, key attributes of this culture set could have very different meanings and the interpretation undergirding the *Divine Right of Kings* was hotly contested. John Locke spent the whole of his *First Treatise* debunking Filmer's arguments and began the *Second Treatise* by stating boldly:

> It having been shown in the following discourse, I. That Adam had not, either by natural right of fatherhood, or by positive donation from God, any such authority over

his children, or dominion over the world, as is pretended (Locke, 2003, p. 100).

Here, Locke is denying the type of "power of life and death, over their children or family" that James I had claimed. In the next section of the *Second Treatise*, entitled "Of the State of Nature", Locke reinterprets the "law of nature" as justifying, not absolutism, but constitutional monarchy created by a social contract. Thus monarchy was accountable to the people and removable by revolution if the monarch acted very badly.

A critical idea here is that monarchs' control over political power has to be interpreted as a result of the delegation of this power to them from a sovereign people. If a monarch abuses these powers or fails to act in the interests of the nation, then people have the right to withdraw that delegation. Thomas Stephenson, a conspirator in the "Gunpowder Plot" to blow up James I in 1605, articulated this view as follows: a Prince who governed badly could be "deprived of his kingdom by the authority of the assembly of the people" (Sommerville, 1999, p. 70).

Englishmen who opposed absolutist government not only disputed the *Divine Right of Kings* but also articulated an alternative political philosophy rooted in exactly the same English culture set. They argued in favor of a contractual basis for power as manifested in the coronation oath where the king promised to rule wisely. They maintained that the king was indeed bound by a social contract that empowered him in the first place, and by man-made laws, not just by particular interpretations of natural ones.

This type of theory reached its apogee in the wake of the civil war, 1642-1649, when several radical groups mobilized (e.g., Hill, 1972). Most famous were the Levellers who emerged out of the Parliamentarian armies and advocated for a republican government based on a broad distribution of voting rights. In 1647 they, along with other members of the army, debated Oliver Cromwell in Putney Churchhouse in West London. On October 29 Cromwell was presented with the Leveller manifesto, "An Agreement of the People". Colonel Thomas Rainborough told Cromwell: "I do think that the poorest man in England is not at all bound ... to that government that he has not had a voice to put himself under"(Robertson, 2007, p. 69). This was followed by a show of hands in favor of extending voting rights to "all free Englishmen". Subsequent version of the agreement included the clause "all men of the age of one and twenty years and upwards (not being servants, or receiving alms, or having served the late King in Arms or voluntary contributions) shall have their voices" (Haller and Davies, 1944, p. 321).

We represent the cultural configuration undergirding this very different political philosophy and model of political institutions, which we call *Popular Sovereignty* in Figure 7, which has exactly the same attributes (and feasible connections) as in Figure 6, but a different set of edges are selected. Central to this configuration is the incorporation of *Ancient Constitution* and *moral economy* as key ideas on how *hierarchy* is exercised, what makes it legitimate and what the rights and obligations of different individuals are in the social order of the country at the time. Also

significant is the replacement of *paternalism/deference* with the much more "horizontal" solidarity embodied in *neighborliness.* As stressed by our systems approach, once these attributes are in the picture, the meaning of *hierarchy* and *religion* are almost completely transformed.

Similarly, the meaning of the *religion* attribute, which is abstract and free-standing, is altered when it is interpreted through the lens of the *Ancient Constitution.* This can be seen from the fact that the defenders of the *Divine Right of Kings* cited Proverbs 8:15, which states "By me kings reign, and princes decree justice". Moreover, Psalms 82:6 says "I have said, Ye are gods". Yet this did not mean that kings were literally gods, but just that they received their power from God (see Sommerville, 1999, pp. 35-36). As Sommerville (1999, p. 60) puts it: "Since natural law did not mark out any particular person or persons to rule the commonwealth ... it followed that political power had first resided in the community as a whole." The anti-absolutist Matthew Kellison made this argument concisely in 1621 "seeing that Nature made all equall, and that there be no more reason why this power should be in one rather than another, it followeth that it is first in the communitie"(Somerville, 1999, p. 60).

A telling example of differing interpretations of the Bible is the exchange between Roger Maynwaring, a supporter of Stuart absolutism, and John Pym, who went on to spearhead the Parliamentary side of the civil war against Charles I. Maynwaring argued that Jesus's statement that one should "render to Caeser the things that are Caeser's" implied that the natural law allowed the king to raise taxes. Pym disagreed, arguing that Jesus was referring to the ancient Jews whose homeland was a province of Rome at that time and "their case is different from us"(Sommerville, 1999, p. 66).

Another commonly cited passage was St. Paul's statement in Romans 13:1 that "Let every soul be subject unto the higher powers. For there is no power but of God: the powers that be are ordained of God". Absolutists interpreted this to support the *Divine Right of Kings*, while their opponents, using the lens of *Ancient Constitution*, interpreted the phrase to imply not that God had granted power directly to the king, but rather he gave power to the sovereign people who then delegated it to the king on conditions defined by a social contract (Sommerville, 1999, p. 10, f. 1).

The meaning of *religion* is also modified by the egalitarian principles of *neighborliness* and with a re-interpreted notion of *nuclear family.* Such a wiring could be bolstered by Matthew 19:24: "it is easier for a camel to pass through the eye of a needle than for a rich man to enter the kingdom of God", which clearly had a natural egalitarian interpretation. These different interpretations were linked to the broader context in which they were situated. For example, various forms of Protestantism, emphasized a direct relationship between the believer and God, without the need for institutionalized intermediaries like priests and bishops. This was more compatible with egalitarian interpretations, as in the beliefs of Protestant dissenting sects like the Puritans and so-called nonconformist groups such as the Anabaptists and Quakers.

What is notable in these opposing political interpretations is that they were both based on the same English cultural attributes. This is what Laslett (2000, p. xi) stresses: "early modern England had both poles of the authoritarian/egalitarian vector established in its attitudes. Filmerian patriarchal despotism stands at one end and the egalitarianism of Hobbes, the Levellers and Locke stands at the other." As in our framework, any cultural configuration has to select attributes and interpret them. Sommerville observes: "early modern English people were fond of citing precedents", but "precedents had to be interpreted" (1999, p. 103).

We also note that *Popular Sovereignty* was not just a philosophy. It became a potent cultural configuration legitimizing and then propagating new political institutions in the aftermath of the civil war and then again after the Glorious Revolution. As in our framework, this configuration emerged as a way of supporting very different political arrangements.

All of this highlights the cultural struggle between the two essentially diametrically-opposed worldviews and corresponding cultural configurations in 17th-century England. The articulations by people like Sir Robert Filmer and James I on the one side, and the cultural entrepreneurs, such as John Locke and Sir Edward Coke, favoring *Popular Sovereignty*, on the other. This struggle mattered because the two sides were trying to convince English society to accept the legitimacy of their interpretation. Since the choice of cultural configuration supporting a particular set of political institutions is largely a collective one, persuading a large fraction of the English public was a major battleground. How well and plausibly these ideas were articulated thus mattered greatly. We will next see that this competition was also shaped crucially by shifts in political power.

### 3.3 Politics and Saltational Cultural Change in England

What explains the surge of interest in the *Popular Sovereignty* interpretation? As we have argued, this was not caused by a sudden change in the English culture set. The elements that were fused together to create the *Popular Sovereignty* configuration were present all along and did not undergo any major metamorphosis. Rather, as Sommerville sums it up (1999, p. 75): "Talk of resistance became more common after 1640 not because of the sudden discovery of resistance theory, but because resistance had become a practical possibility".[20]

Resistance became a practical possibility, in turn, because, in terms of Figure 3, politics transformed. A long process of social change, shifting economic power away from the aristocracy and the supporters of the monarchy had been underway since the late 16th century, and this gathered pace with the Reformation and its reverberations in England, especially with the break with the Catholic Church (Tawney, 1941; Stone, 2001, Heldring, Robinson and Vollmer, 2021).

Equally important was the bottom-up process of local organization and associated demands

[20]By "resistance theory" Somerville means the doctrine that it was acceptable to resist illegitimate political authority.

that picked up speed during the 16th century, often emboldening the middling sort of Englishmen and drawing support and inspiration from *Ancient Constitution* and *moral economy* (Hindle, 2000; Acemoglu and Robinson, 2019). Many communities were already formulating such political ideas, even before these were gelled into a coherent configuration of *Popular Sovereignty* at the national level. Cultural entrepreneurship mattered because it determined whether the configuration of *Divine Right of Kings* could be dislodged in the ensuing cultural struggle.

Arguably more momentous was the effect of the growth in overseas trade and ventures, which were for the most part led by new men who had no ties to the monarchy and were resentful of crown monopolies that excluded them from other lucrative trades (Acemoglu, Johnson and Robinson, 2005b; Brenner, 1993; Pincus, 2009; Jha, 2015). These merchants, adventurers and in some cases minor nobility, started challenging the absolutist model of James I and Charles I in the first half of the 17th century, and their political struggle ultimately led to the English Civil War. As our discussion of the Levellers above emphasized, many of the ideas that became the *Popular Sovereignty* configuration were articulated and started gaining acceptance in this process. Thomas Hobbes's and John Locke's ideas about the social contract were in turn inspired by these developments.

In terms of the conceptual structure summarized in Figure 3, we can interpret the major change as a shift in de facto political power (political power that is not allocated by formal institutions but comes from the ability to solve collective action problems and mobilize resources). This change in "politics" tapped into the same culture set, but generated a demand for and an articulation of a different cultural configuration. In combination with the power of these new groups, which turned out to be quite formidable, as witnessed by the outcomes of the two civil wars of the 17th century, these political changes altered the balance between the competing configurations and their worldviews. As power shifted away from the monarchy, an interpretation emphasizing the ruler's dependence on society and limitations on his powers became more meaningful and broadly acceptable.

What was transpiring was not just military and political conflict, but also cultural struggle. Underdown (1985), for example, argues that "Cultural conflict is, then, the thread that links early Stuart popular politics with its Interregunum counterpart, and ultimately with the Restoration" (p. 268). Thus, Englishmen and women favored different configurations and they fought over them.

While our focus above was on the switch from one political configuation to another, these configurations had major consequences for other aspects of culture. Indeed, when conflict undermines a particular configuration, possibilties for new connections emerge, heralding broader cultural change often apparently unrelated to the initial cultural stuggle. For example, in the English Civil War, it was not just political culture that changed, but also religious beliefs and interpretations (Hill, 1980). Como remarks: "One effect of the civil war was to throw up a dizzying array of competing

ideas and discourses" (2018, p. 7). In particular, "the civil war helped to produce a kaleidoscopic landscape of competing Protestant groupings" (p. 18), and Como observes a "slew of theological deviations errupting among the godly by 1643. Hallowed Christian verities, such as strict predestination, the existence of an incorporeal soul, even the Trinity, were being questioned" (p. 180). Braddick notes the new forms of religious association "were in themselves a threat to learned divinity and religious order, and their teaching threatened fundamentals of received doctrine—about sin, the soul, salvation, and the role of scripture in guiding Christian belief and practice" (2008, p. 345). Morrill's emphasis is similar: "The chaos of the civil war created a bewildering variety of sects and gathered churches" (2000, p. 79).

After the civil war broke out in 1642, Parliamentary forces repealed "the Elizabethan statutes setting up the Church of England" abolished "the Book of Common Prayer, which was full of ceremonies and prayers which were Catholic in origin" and banned "the celebration of Jesus's birth (Christmas), and of his death and resurrection (the Easter Triduum)" (Morrill, 1993, p. 14). They created the Westminster Assembly to design a new church but no generally acceptable design emerged from this. Morrill points to cultural changes such as "attacks on primogeniture and other key aspects of property rights", and arguments for "a radical democratization of legislature, executive and judiciary" as being significant. But he also states, "most remarkable of all, a surrender by the state of the right to determine and impose on all citizens a uniformity of religious belief, observance and practice" (1993, p. 17). His conclusion about the consequences of the civil war is that "As the most fixed and daunting structures of the external world—monarchy, lords, Church—crumbled, so the internal pillars of thought crumbled. Men were freed to think hitherto unthinkable thoughts" (1993, p. 19).[21]

The English civil war was initiated by an invasion of Scottish forces, compelling Charles I to summon Parliament since he did not have money to raise an army. This event led to the sitting of the Short and Long Parliaments which outlined their grievances against the monarchy. Morrill and Como are thus arguing that once the political conflict was ignited, there was a protracted cultural struggle that resulted in a sudden, discontinuous reforging of the cultural configuration towards *Popular Sovereignty.* We can see these radical changes readily in the religious sphere. Morrill writes: "In the early and mid-seventheenth century, most intellectuals and most governors believed that there was a divine imperative to bring godliness, good discipline and order to the English nation. God was guiding his people towards a Promised Land ... No such vision survived the interregnum" (2000, pp. 80, 81). The cultural consequences of this "breakdown of a world-view dominanted by religious imperatives" (2000, p. 82) were immense and "can be seen in literature and in science" (p. 82).

This English case illustrates several key themes of our essay. First, cultural change was pro-

[21] An interesting implication of this, discussed in Como, is the emergence of the principle of "toleration", which is also at the heart of Locke's thought; see Locke (1983).

duced by combining well-established attributes in a way that provided completely different meanings. Second, cultural change and political conflict were inseparable. Third, political conflict was accompanied by a major cultural stuggle, as illustrated by the dynamics of religious beliefs as well as the broader discussions over political legitimacy. Finally, cultural change was saltational. This last point is clear from the religious changes that occured at the start of the civil war. It can also be seen from the ideas of the Levellers, who articulated the foundations of a very different cultural configuration and social order. This group came out of the New Model Army, formed by Parliament in 1645 (Gentles, 2022). Within two years this army had given birth to the Levellers and the Putney Debates, and it began to publish a series of documents called "An Agreement of the People", which set out a radically egalitarian vision of English politics.

The English case also showcases the distinctive features of our framework, for the cultural changes we have discussed here cannot be easily accounted for by existing theories. In contrast to the gradual, inter-generational evolution of culture in these approaches, we are seeing fundamental changes in key aspects of English culture within the span of a couple of years. We also believe that any theory that does not incorporate a systems approach cannot explain how a process that started with Charles I's partial loss of legitimacy and control could be a trigger for wide-ranging transformations in political and religious beliefs.

# 4 Confucian Culture, Autocracy and Democracy

In this section, we turn to Chinese culture, which illustrates both the importance of the systems approach to culture and how given attributes can gain very different meanings and thus underpin discontinuous change in fluid cultures, such as Confucian thought.

The term "Confucian" is often used to describe Chinese culture, since it is argued to have major elements that go back to the thought of Confucius and his followers (e.g., Weber, 1951, Huntington, 1991, 1993, Yew, 2000, Kissinger, 2011). Many Western writers have also argued that this culture is rigid and inimical to democratic participation. Kissinger, for example, describes the Confucian "canon" as "something akin to China's Bible and its Constitution combined" (2011, p. 14), while Huntington (1991) has no doubt about the consequences of this for political institutions, claiming that "no scholarly disagreement exists regarding the proposition that traditional Confucianism was either undemocratic or antidemocratic" (1991, p. 24).[22] At some level this seems plausible. Since at least the rise of the Qin dynasty in 221 B.C., China has been ruled by autocratic political systems—the imperial state until 1912; shifting warlords and the Kuomintang until 1949; and since then the Communist Party. Apart from a brief window around 1912, and recently in some local elections,

[22]Others have drawn similar conclusions from certain specific aspects of Chinese culture, such as its "collectivist" nature (Talhelm et al., 2014), or the fact that it is based on "face" (Ho, 1976), or the prevalence of a practice like *guanxi* (connections) (Gold, Guthrie and Wank, 2002).

China never had any sort of representative or democratic institutions in this approximately 2,250 year period. We will argue, in contradistinction to this perspective, that Confucian culture is made up of highly abstract attributes and generates a rich array of different cultural configurations. We then illustrate how these cultural configurations have emerged under different circumstances, most importantly in Taiwan over the last few decades.

### 4.1 The Confucian Culture Set

Confucius's philosophy emphasizes that everyone is morally perfectible and should engage in a process of self-improvement to find "*The Way*" (*Dao*), which can be understood as "becoming virtuous". Virtue is linked with ritual and starts in the family, making it intertwined with notions of respecting hierarchy, both within and outside of the family. Once virtue is established in the private sphere and the family, it spreads in society all the way up to the state, which, according to Confucius, has to be run by virtue, not rules or bottom-up participation.

One of Confucius's most famous observations states (*Analects* 16.2, p. 193): "When the Way prevails in the world, commoners do not debate matters of government." Thus, it seems, good governance could not be achieved by means of political participation. Another famous aphorism summing this up (much quoted by President Xi) is (12.19 p.134):

> Ji Kangzi asked Confucius about governing ... Confucius responded, "In your governing ... The Virtue of a gentleman is like the wind, and the Virtue of a petty person is like the grass—when the wind moves over the grass, the grass is sure to bend".

In light of these ideas in Confucian thought, it is natural to conceptualize *The Way* as a central attribute (as we do in Figure 8) and interpret it as the bedrock of a strong justification for hierarchical rule. Nevertheless, Confucian philosophy, and the interpretation of *The Way,* is much more fluid than this simple account would imply.

Confucius's sayings were collected after his death by his students in a text called the *Analects*. These consist of highly aphoristic dialogues between Confucius (identified as the Master) and various students. This aphoristic manner of communication is one of the major reasons why the meaning and interpretation of Confucian precepts are not determinate and, in terms of our framework, correspond to highly abstract attributes.

This is particularly important in the case of *The Way*, which represents much more than unwavering respect for rulers and hierarchy. Consider this passage of the *Analects* (12.7, p. 128):

> Zigong asked about governing. The Master said, "Simply make sure there is sufficient food, sufficient armaments, and that you have the confidence of the common people". Zigong said, "If sacrificing one of these three things becomes unavoidable, which would you sacrifice first?" The Master replied. "I would sacrifice the armanents". Zigong said,

> "If sacrificing one of the two remaining things becomes unavoidable, which would you sacrifice next?" The Master replied "I would sacrifice the food. Death has always been with us, but a state cannot stand once it has lost the confidence of the people."

Highlighting the importance of the systems approach, there are many different ways of interpreting virtuous behavior. Indeed, the statement "a state cannot stand once it has lost the confidence of the people" can be given an explicitly democratic interpretation. In this interpretation, *The Way* stands for the expectation, or even the right, of people to be ruled by virtuous rulers. If the ruler is not virtuous, disobedience may be justified.

As important as virtue to Confucian thinking are social roles. A telling and well-known passage goes as follows (15.24 p. 183): "Zigong asked: 'Is there one word that one can practise throughout one's life?' The Master said: 'Is it not *shu*? What you yourself do not desire, do not do to others'." The word *shu* can be translated as 'understanding' (2003, p. 183) or 'reciprocity' (Goldin, 2011, p. 15), making this the Confucian version of the Golden Rule. However, its usual meaning is a little different. As Goldin (2011, p. 16) explains it, it should be interpreted as "doing unto others as you would have others do unto you *if you had the same social role as them*". An early text, the *Book of Rites*, emphasizes the distinct roles people had to occupy, and decrees: "Everyone should stay in his place" (Fei, 1992, p. 65). These included the "ten relationships": "Gods and ghosts, monarchs and subjects, fathers and sons, the noble and the base, the intimate and unconnected, the rewarded and the punished, husbands and wives, public affairs and private affairs, seniors and juniors, and superiors and inferiors—these are the principle types of human relationships." Even more explicitly, as Fei (1992, p. 66) emphasizes, "the basic character of traditional Chinese social structure rests precisely on such hierarchical differentiations as these." These statements clarify that social roles are tightly intertwined and motivate our choice of *hierarchy* as another key attributes.

But they were equally intertwined with family as well. Key rites for finding *The Way* revolved around the family and filial piety. Once this was established inside of a person, it would extend to the family and from there outwards to the whole society. A later Confucian text, the *Great Learning,* puts it like this (Legge, 1893, pp. 358-359):

> Their thoughts being sincere, their hearts were then rectified. Their hearts being rectified, their persons were cultivated. Their persons being cultivated, their families were regulated. Their families being regulated, their States were rightly governed. Their States being rightly governed, the whole kingdom was made tranquil and happy.

Indeed, in a famous metaphor, Fei (1992) argued: "In Chinese society, the most important relationship—kinship—is similar to the concentric circles formed when a stone is thrown into a lake ... Everyone stands at the center of the circles produced by his or her own social influence.

Everyone's circles are inter-related" (pp. 62-63). These elements are represented by our next attribute: *lineages* (encompassing both family relations and kinship).[23]

Equally important in Confucian thinking is the role of ritual, already highlighted by some of the quotations above. Confucius emphasized that *The Way* could be achieved by attending to the rites (12.1 p. 125): "Yan Yuan asked about Goodness: The Master said: "Restraining yourself returning to the rites constitutes Goodness"."

In fact, Confucius built on ideas about how people learned tradition and lore from peers, arguing that "Being able to take what is near at hand as an analogy could perhaps be called the method of Goodness" (6.30, p. 63). Even a handshake was a tool of ritual (see Finagrette, 1972, p. 9). This motivates our next attribute: *ritual*.

*The Way* is connected to God, *Tian*, and Confucian thought has been characterized as "humanistic religion" or "religious humanism" (Yao, 2000, p. 46) since there is not the clear distinction between the human and the divine that there is in Abrahamic religions. Religious beliefs have therefore played an important role in the interpretation and propagation of Confucian thought, so in Figure 8 we also include *traditional religion* (where "traditional" emphasizes that this was not the state religion). Finally, as in the English case, we include *in-group identity*, which plays an important social and political role, even if it is less central for our focus here. Of course, there are other important aspects of Confucian thought as well, but we focus on these attributes, which we view a central for cultural configurations connecting to political institutions.

Since these attributes all come from and are connected to Confucian teachings, they are not fully free-standing. In particular, we interpret *The Way* and *Ritual* to be entangled. Nevertheless, the Confucian culture is still fairly fluid, because all its attributes are highly abstract. This is not only because many ideas are communicated via aphorisms, but also because everything in Confucian philosophy was context specific and relative to a particular human relationship. As Goldin (2011, p. 10) notes, "Confucius wished his statements to remain fluid."

## 4.2 Cultural Configurations

Unsurprisingly, given such abstract attributes and a rich set of cultural configurations, Confucian culture has been very fluid throughout the ages. This can be seen in its adaptability and durability in the face of major upheavals in the ethnic, ideological and political priorities of different

[23] Highlighting the abstract nature of these attributes, recall that Confucianism maintains that one must subordinate oneself to hierarchy, especially within the family. Yet, Confucius argues in another text, the *Canon of Filial Piety*, that this is conditional on correct behavior: "Thus whenever there is unrighteousness, a son cannot but expostulate with his father and a minister cannot but expostulate with his lord. Thus whenever there is unrighteousness, one expostulates about it. To follow one's father's decrees - how can that be filial piety?" (quoted in Goldin, 2011, p. 36). Hence, even filial piety has limits. Interestingly, this exact passage is quoted by those who now argue that Confucianism is consistent with democratic practices (e.g., Bell, 2012, p. 12).

dynasties.[24] It is most saliently illustrated, however, by the contrast between the various cultural configurations that supported a highly autocratic conception of politics during the Imperial times, often referred to as the "*Mandate of Heaven*", to capture the idea that the mandate of emperors came from heaven, and the cultural configuration that has provided the justification and support for democratic institutions in Taiwan over the last 30 years, which we will refer as "*Confucian Democracy*". We next discuss these two cultural configurations.

**The Mandate of Heaven**

Figure 8 depicts the linkages that make up the cultural configuration we call the *Mandate of Heaven*. The term goes back to the Zhou Dynasty, whose rulers had claimed the right to rule because of the mandate coming from the heavens. This notion was then appropriated by the Lord of Qin, and thereafter all Chinese emperors claimed to have received the *Mandate of Heaven*. This was all imposed from the top, with no ability for regular people to object to this interpretation.

It is easy to see how Confucian culture can generate a cultural configuration supporting such an approach and the political institutions that go with it. In Figure 8, we represent it as comprised of five attributes, *The Way, hierarchy, ritual, lineages* and *traditional religion* all being interconnected. *The Way* and *hierarchy* play a defining role by enshrining the idea that legitimate power, authority and virtue all emanate top-down. In the political sphere, this means they originate from the ruler, who has the right to rule given to him by tradition or religion. To the extent that the mandate is literally interpreted as coming from heaven, religious ideas are important as well, and these are often rooted in *traditional religion*—captured by the link to this attribute and representing the justification coming from God (Tian) for the ruler's right to rule.

These nodes are then connected to both *ritual* and *lineages*, which both reflects the importance of these two attributes in Confucian thinking and also stresses the fact that they redefine *ritual* and *lineages* in the context of this hierarchical nature of society. Note further that the two other attributes are not linked to the rest. The *in-group identity* could be linked, especially if defining the nature of the in-group, for example as the Han Chinese, is important to the cultural configuration in question. Crucially, however, the fact that the *Mandate of Heaven* configuration has emerged and supported the dynasties of Mongols and Manchus highlights that many different types of in-groups are feasible.

Our representation of the *Mandate of Heaven* also has similarities to the ideological foundations

[24] In particular, the degree of top-down control and the influence of the philosophy of Shang Yang, the intellectual architect of the Qin's despotic rule and founder of the Legalist school, ebbed and flowed during different dynasties. Although the emphasis on Confucian thought was diminished during some of these periods, it still remained a central part of Chinese people's culture and part of the governing philosophy of the elite. We interpret these changes in political institutions and the associated cultures as being undergirded by the fluidity of Confucian culture as well. For example, different elements of Confucian teaching were emphasized during the despotic Ming Dynasty and the more permissive and less repressive Tang and Song Dynasties (see the discussion and references in Acemoglu and Robinson, 2019).

of the Chinese Communist Party's reign today, especially under President Xi, who often appeals to Confucian justifications for his authority. In this case, the mandate is not literally from the heavens, but an autocratic order is justified by the virtuous behavior and nature of the leaders. Yet, in a classic top-down fashion, it is not the people or some outside body that decides whether the ruler is virtuous, and it is sufficient for this to be claimed by the ruler and other elites.

### Confucian Democracy

Claims of the unwavering autocratic nature of Confucian thought in the literature notwithstanding, since the late 1980s Taiwan has developed a vibrant democracy and the past decade has witnessed a sustained movement demanding democracy in Chinese controlled Hong Kong. As in our discussions in the last two sections, it is remarkable how discontinuous and rapid these cultural changes have been. It took less than a generation in both societies for ideas of democratic rule and bottom-up political participation to become completely central to the political discourse.

One interpretation would be to maintain that this was the result of Westernization and Confucian culture being abandoned, as argued by Huntington (1991) and Henrich (2020). The evidence contradicts this view, however. First, if anything, there was less reason for Confucianism to decline on these two islands, since they avoided the anti-Confucian drive of Mao's Cultural Revolution. Second, the Kuomintang who ruled Taiwan between 1945 and 2000 emphasized Confucianism as part of an attempt to distinguish itself from the communists on the mainland.

Available survey evidence confirms the enduring importance of Confucian ideas in Taiwan. Fetzer and Soper (2012) use data from the World Values Survey and the Asian Barometer to document the extent of Confucianism in Taiwan, China, South Korea and Singapore. They do this by using the answers to three questions. The first captures family values; "for the sake of the family, the individual should put his [or her] personal interests second". The second involves social hierarchy; "if there is a quarrel, we should ask an elder to resolve the dispute" and also "being a student one should not question the authority of [one's] teacher". Finally they look at social harmony; "when one has conflict with a neighbor, the best way to deal with it is to accommodate the other person". They find little difference between the way that people answer these questions in Taiwan and China, thus providing no support for the retreat or collapse of Confucian values in Taiwan.

Highlighting the competition between different cultural configurations and worldviews, Fetzer and Soper (2012) also document an interesting pattern: in 1995 "adherence to Confucian values has no effect on a respondent's support for democracy ... the separation of the state from Confucianism in Taiwan has freed the tradition from its association with authoritarian values" (p. 13). By 2001, however, after the first democratic presidential elections, the correlation between Confucian values and attitudes towards democracy began to turn positive and Confucianism was "gradually

transforming itself into an ideology that either had no impact on such political attitudes or bolsters enthusiasm for certain aspects of democracy and human rights" (Fetzer and Soper, 2012, p. 43).

Therefore, rather than Confucian thought being abandoned as Huntington and Henrich suggest, the rapid—arguably saltational—change in Taiwan (and possibly Hong Kong) was driven by an emergent configuration that fundamentally altered the meaning of *The Way*. Figure 9 depicts this configuration, which we call *Confucian Democracy*. *The Way* and *ritual* are again connected to *lineages* and *traditional religion*, but these two are no longer linked to each other, emphasizing the less central role of lineage-related ideas in the political equilibrium. More importantly, *hierarchy* is no longer connected to *The Way* and *ritual*, and this fundamentally alters the meaning of *The Way*.[25] The fact that only a few connections are different in this case than in the *Mandate of Heaven* in Figure 8 also explains why cultural change can be so discontinuous—most of the key attributes are playing similar roles, but are now part of a system that modifies the meaning of political legitimacy.

The alternative configuration represented in Figure 9 should not be seen as a completely new innovation over the 1990s. Similar interpretations of what virtuous behavior meant were present in the justification for the huge revolts that Chinese empires witnessed. These included Liu Bang's insurrection that ended the Qin Dynasty, the An Lushan Rebellion in the 7th century, and the Taiping and Boxer Rebellions in the 19th century, which all pointed to the unvirtuous behavior of rulers. Fetzer and Soper's conclusion, echoed by Shin (2011), is in line with our interpretation that Confucian thought is inherently compatible with a democratic interpretation:

> the Confucian tradition is flexible ... it allows for more than one interpretation, and it can be used as a basis for democracy and human rights (p. 3)

These ideas are related to an emerging literature, including Qing (2012), Chan (2013), Bell (2016), and Bai (2019), who provide models of "Confucian Democracy". These scholars argue that Confucian principles are perfectly compatible with democratic practices and they use many citations from the broader Confucian historical and philosophical literature to make this case. Qing (2012), for example, proposes a model of a modern Confucian constitution with three bodies, one of which is democratically elected by the people (the "House of the People"). He traces the origins of this idea to *The Gongyang Commentary*, a commentary on Confucius's writings from the Spring and Autumn period, between 771 and 476 B.C., overlapping with Confucius's life (551 to 479 B.C.). *The Gongyang Commentary* argues that to rule one must "share in the realms of heaven, earth and human beings" (quoted in Qing, 2016, p. 27). Qing interprets this to mean that "The legitimacy of the 'human' refers to the legitimacy of the will of the people because conformity to the will of the people directly determines whether or not people will obey political authorities" (p. 27). He adds

[25] In this alternative configuration, *ritual* and *lineages* are still central and consequently structure relations within families and kin groups in a somewhat hierarchical way, consistent with the evidence from the World Values Survey.

(p. 32): "monarchy is not the sole, unwavering choice of Confucianism ... Changes in historical circumstances may necessitate changes in the form of rule."

Notably, though consistent with this emerging scholarship, our account provides a key new conceptual element, the systems approach, which is essential for understanding how the meaning of the same cultural attributes can be so rapidly transformed.

### 4.3 Political Foundations of Cultural Interpretations

We have argued that Taiwan may have become democratic not because it abandoned Confucian thought, but rather because there were always other types of political institutions that were compatible with Confucianism. Why do we not see these types of more democratic cultural configurations in Chinese history? The answer is politics—more democratic configurations were not selected because political power rested with monarchs and groups that had authoritarian interests and agendas.

The origins of the first Chinese imperial dynasty, the Qin, lie with the highly authoritarian political project of the "legalists" (the loci classici are Han Feizi, 2003, and Shang Yang, 2019). These ideas were then fused with Confucianism and were effectively used by successive dynasties. Even if there were rebellions, power never consistently shifted to groups that could or would want to strengthen bottom-up participation in politics. This started to change with the brief period of republican rule after 1912, but was cut short by the communist takeover of power. Mao Zedong's conception of politics was not too different than the *Mandate of Heaven* configuration developed above, and certainly agreed with the main top-down precepts of legalism. Bell and Pei note: "In China, the supposedly egalitarian ideals of communism became transmuted into hierarchical social forms without much controversy" (2020, p. 23).

In fact, the legalist project was applauded by the young Mao who, as an 18 year-old, wrote an essay praising Shang Yang whose laws "were good laws" and Mao despaired at "the stupidity of the people of our country" (Spence, 2006, pp. 17-18). After Mao's death, there was a major transformation of Chinese institutions, but the monopoly of power of the Communist Party did not change, and one-party rule once again selected a configuration similar to the *Mandate of Heaven*. As de Bary (1998, p. 164) argues, "it can hardly be doubted that Confucianism ... has become the claimed ideological justification for one-party rule, for openly rejecting peaceful evolution to democracy, and for suppressing demonstrations."

In contrast, once political power shifted away from narrow elites in Taiwan and Hong Kong, a different facet of Confucian philosophy emerged, enabling a new configuration that could support more democratic values and institutions. Hence, in our framework, it is not surprising that the Communist Party in China has used the Confucian legacy to attempt to sustain its despotic rule, while the same legacy is synergistic with vibrant democracy in Taiwan. This is what Weber (1951, p. 249) understood seven decades ago, when he wrote: "the basic characteristics of the [Confucian]

"mentality" ... were deeply co-determined by political and economic destinies".

The conclusion from this discussion is that Confucian culture is a repertoire of ideas, practices and concepts and does not boil down to a determinate cultural configuration supporting a specific set of political institutions or an unwavering tendency towards authoritarianism. We can see the same forces at work in the ease with which mainland Chinese culture has adapted to a much more individualistic lifestyle and social structure over the last two decades (see Yan, 2009).

Overall, aspects of the Confucian repertoire can be, and have been, interpreted to support different political systems—an autocratic one as in the Imperial era, and more democratic political legitimization as in Taiwan and Hong Kong.[26] As with the English culture, the fluidity of the Confucian culture is at the root of this reinterpretation and makes very rapid, almost discontinuous change possible. Also, as with the English case, the Chinese setting highlights the distinctive aspects of our theory. The divergence of cultural configurations between mainland China and Taiwan makes both the central role of political factors and the importance of rapid change clear. Moreover, without the systems approach, it is very difficult to account for the simultaneous persistence of critical attributes of the Chinese culture set and very different legitimization for political rule that these attributes have provided in Imperial China, Communist China and post-democracy Taiwan.

# 5 Benefits and Costs of Hardwired Cultures

Our conceptual framework eschews any simple classification of traditions into "good cultures" and "bad cultures". Rather, cultures differ in terms of their attributes and their feasible connections, and this creates differences in how fluid or hardwired they are. In this section, we explore these issues. We first illustrate some costs of less fluid cultures using the quintessential example of the Indian caste system, which enshrines a rigid hierarchy across castes. We then discuss the emergence of monotheism, and especially what are sometimes referred to as "Big Gods", which are moralizing deities that promote coordination and rule-following among their subjects. We interpret these Big Gods as a transition from a more fluid, polytheistic culture to a more hardwired one, which brought a range of benefits at least initially, because they allowed greater within-society cooperation and better economic and political coordination. Finally, we turn to the Islamic culture. Though highly fluid in some aspects, the way in which many attibutes were entangled due to the nature of the Sharia law makes some of Islam's political traditions more hardwired. We argue that this feature was useful in the early flourishing of Islamic civilizations and their military expansion, but then became an impediment to political change.

[26]One interesting implication of our framework in this context is that if China can completely defeat the democracy movement in Hong Kong, then the prevailing cultural configuration in Hong Kong may start resembling the one in mainland China rather than the Taiwanese one.

### 5.1 The Caste System

Though there is an intense debate over the evolution of the Indian caste system, and the role that colonialism may have played in its evolution, it was present in Indian society as early as 2,500 years ago in the *Vishnu Smriti,* one of the most ancient Indian texts. There it says

> Brahmanas, Kshatriyas, Vaisyas and Sudras are the four castes. The first three of these are (called) twice-born. Their duties are. For a Brahmana, to teach (the Veda). For a Kshatriya, constant practice in arms. For a Vaisya, the tending of cattle. For a Sudra, to serve the twice born.

Here the book is describing the division of Indian society into four varnas. Embedded inside the varnas are jatis, which are usually referred to as ‘castes’. There are around 3,000 jatis in India. Duties of the different varnas in the *Vishnu Smriti* include “reverence towards gods and Brahmanas”. A final group, the untouchables, or Dalits, of whom there may be 200 million in India today, sit at the bottom of the hierarchy outside the caste system. In our framework, the attributes generated by the Indian caste system are highly specific and entangled. The attributes of the caste system are, by definition, specific: almost every aspect of social life is regulated according to caste identity. These attributes are also entangled, as economic functions, social roles, status, family structure and living arrangements are all related to the same foundational caste roles, and these roles are enforced by religious authority.

The best way to understand the implications of the caste system is via the writing of the great Dalit intellectual and statesman B.R. Ambedkar, whose 1936 lecture, “the Annihilation of Caste”, is a devastating condemnation of the system. He wrote:

> the caste system is not merely a division of labor. It is also a division of laborers. Civilized society undoubtedly needs division of labor. But in no civilized society is division of labor accompanied by this unnatural division of laborers into water-tight compartments. The caste system is a hierarchy in which the division of laborers are graded one above the other. In one of its aspects, it divides men into separate communities. In its second aspect, it places these communities in a graded order one above the other in social status. (Ambedkar, 2014, pp. 233-234).

Ambedkar elsewhere likened Indian society to “a multi-storeyed tower with no staircase and no entrance. Everybody had to die in the story they were born in” (quoted in Roy, 2014, p. 104).

Organizing society like this obviously has many implications (see Acemoglu and Robinson, 2019). For our purposes it stands as a salient example of a hardwired culture. Its attributes are entangled (originating from the same cast hierarchy) and highly specific—everyone is born into the jati and varna of their parents, and this determined not just their occupation but their station

in life. Already in the *Vishnu Smriti,* different varnas have distinct occupations and within the varnas, jatis have more specific occupations.

That this system really has bite can be seen from the data collected by the first person who systematically investigated it, the British colonial administrator E.A.H. Blunt. Blunt's 1931 book *The Caste System of Northern India* used data about occupations and jatis from colonial censuses to explore whether different jatis actually undertook the occupations with which they were traditionally associated. He merged the jatis into 12 categories, beginning with agriculture, laborers and village menials, pastoral occupations, learned professions, trade and industry, dealers in food and drink, with the final category being beggars. Each of these categories was made up of more specific lines of work and Blunt matched the jatis with these different occupations. His conclusions were striking: 90% of agricultural jatis remained in their agricultural occupations. Elsewhere, the patterns were even more remarkable, with jatis heavily specializing in their narrow traditional occupations: 75% of sweepers swept, 75% of goldsmiths continued in that line of work (the jati was called Sonar), 60% of barbers and washermen continued to shave and wash, 50% of carpenters, weavers, oil-pressers and potters also occupied their traditional professions (Blunt, 1931, p. 240).[27]

The economic consequences of hardwiring people's castes and occupations are clear and were identified by Ambedkar: "the division of labor brought about by the caste system is not a division based on choice. Individual sentiment, individual preference, has no place in it. It is based on the dogma of predestination" (2014, p. 235).[28] As a result, this system was bound to be highly inefficient, and not just economically.

## 5.2 Big Gods

The Indian case system provides the canonical illustration of the costs of hardwired cultures. The most obvious are social and economic, but as we pointed out in Acemoglu and Robinson (2019), the caste system also creates political impediments, because it makes it difficult for society to cooperate and solve its collective action problem, especially in keeping politicians and elites accountable, which is critical for building inclusive institutions.

However, hardwired cultures can also generate economic benefits, because they coordinate expectations, facilitate coordination and may provide better incentives. One of the most interesting examples is that of "Moralizing Gods" or what are sometimes called "Big Gods". Historically, human societies had a multitude of gods and supernatural figures that were morally quite ambiguous, like the Greek Gods. These gods either did not typically intervene in people's lives or were happy to coexist with other gods.

Then, in a short span of time, in several societies there emerged new more powerful gods

[27] See Deshpande (2011) for more recent evidence on occupational patterns by jati.

[28] For more recent evidence on the effects and the economic costs of the caste system, see Hoff, Kshetramade and Fehr (2011), Gupta, Mookherjee, Munshi and Sanclemente (2022), Munshi (2019) and Oh (2023).

that claimed a monopoly of supernatural power, demanded allegiance, laid down moral rules and specified punishments for deviations (Skaperdas and Vaidya, 2020, develop a model of this). A typical example is the Christian religion, where the *Ten Commandments* lay out certain patterns of desired behavior. If one deviates from them, one is sinning, and sinners will be judged and may not be able to enter heaven. In the *Book of Exodus*, the commandments are followed by a long list of other rules with more prosaic punishments, such as "And he that curseth his father, or his mother, shall surely be put to death."

In terms of our framework, adopting a Big God religion would make a culture less fluid than it was before. Polytheistic societies had behaviors that were less standardized (corresponding to more abstract attributes) and had fewer entangled attributes, since these did not all originate from the commands of a Big God and often were not even congruent with each other. For example, Henrich (2020, p. 128) describes the benefits of Big Gods using the example of Islam: "Religions have fostered trade by increasing trust, legitimizing political authority, and expanded people's conceptions of their communities by shifting their focus from their own clans or tribes to larger imagined communities like all Muslims".

The natural conclusion to draw is that: "If people believe that their gods will punish them for things like stealing, adultery, cheating, or murder, then they will be less likely to commit these actions even when they could get away with it" (Henrich, 2020, p. 133). Ensminger and Henrich (2014), Norenzayan (2015) and Lang et al. (2019) provide cross-cultural experimental evidence consistent with these ideas, documenting a correlation between belief in Big Gods and willingness to follow various rules. Therefore, Big Gods, both via the incentives they generated and because of the common identities they created, were quite successful in eoordinating behavior and helped solve various collective action problems, which is one of the reasons why their emergence was often associated with state-building efforts (see Acemoglu and Robinson, 2019, and Wright, 2009). Perhaps it is not surprising that Big God religions (Hinduism, Judaism, Christianity and Islam) greatly expanded and today cover more than half of the world's population.

### 5.3 Benefits and Costs of Islamic Hardwiring

Islam, as Henrich points out, is an example of a religion with a moralizing god and strong supernatural enforcement. It also developed elaborate norms and institutions so that law-breaking could be punished in this world too. For example, the punishment for charging interest was that you would "rise up on the Day of Resurrection like someone tormented by Satan's touch", but this was typically preceded by equally harsh punishments in the hands of an Islamic state or the community.

Islam also proved to be highly adaptable, for example, when it fused with tribal customs in the Arabian Peninsula and later with the traditions of Turkic tribes (Rogan, 2012). Yet, unlike in the English or Chinese case, Islam leaves no room for legistation, for the law has already been created

by God (see Gitmez, Robinson and Shadmehr, 2022, for a discussion of this and its consequences for political institutions). Gibb (1955) states: "Since God is Himself the sole Legislator, there can be no room in Islamic political theory for legislation or legislative powers" (p. 3). Zubaida (2003) concurs, arguing "rulers cannot play a part in legislation" (p. 74). This principle that God created the law which could not be changed by men—what Cook (2014) refers to as the "divine monopoly of legislation" (p. 332)—makes most attributes rooted in the Quran and Hadith quite specific. In our framework, this implies that many attributes, especially those relevant for political legitimization, are entangled, because they trace their origins to religious doctrine and it is difficult to separate one part of the Quran from another.

The historical evidence is fairly clear that Islam had various benefits to the societies that adopted it. Appeal to religious authority allowed Mohammed and the first four Caliphs to unite the peoples of Arabia and build a state where none had existed before. The fact that laws and legislation came directly from God, and perhaps even that key attributes were entangled and one could not pick and choose, was helpful in this initial phase. Its political legitimization enabled Islamic leaders to support coordination and cooperation on a scale previously unimaginable. The most obvious effect of this was the rapid military expansion of the new Caliphate. Within 30 years Arab armies had conquered not just the entire Arabian penninsular but also what is now Isreal, Palestine, Lebanon, Syria, Iraq, Iran, Egypt and Libya. They created a vast new state whose capital moved first to Damascus and then to Baghdad.

The new state provided stability, security and a fair amount of predictable dispute resolution over a large territory, unparalleled in the region. This led to rapid growth of trade in a framework created by Islamic law. As the great Islamic scholar Ibn Khaldun pointed out, the Islamic state "imposes only such taxes as stipulated by the religious law, such as charity taxes, the land tax, and the poll tax. They mean small assessments ... They have fixed limits which cannot be overstepped" (2004, p. 90). Khaldun argues that this system generated a favorable incentive environment. The Islamic state additionally provided public goods such as irrigation, and these along with the opportunities and incentives presented by expanding markets, triggered considerable investment and innovation in agriculture (Watson, 1983, see also Rodinson, 2007). There were various scientific breakthroughs and a great intellectual flowering as well.

Although the tightly structured political system of Islam generated early benefits, it also constricted cultural adaptations in response to fundamental international and technological changes in later centuries. Prohibitions on usury, for example, are generally believed to have retarded financial development in the Islamic world (Rubin 2017).

Other economic institutions, like the *waqf*—a type of religious charitable foundation—may have at first played a useful role by providing some form of property rights against state expropriation. Kuran (2011) has argued that it has also impeded investment and retarded the development of

modern corporate forms. Well-off people started setting up *waqfs* to provide public goods, and sometimes to provide resources to their offspring. This organizational form was useful, because it was not possible to maintain intact business assets, and the *waqf* provided a way of partially circumventing these restrictions, precisely because it was an institution entangled with Islamic teachings, for it had emerged from the interpretation of several hadiths. Yet this entanglement subsequently made it difficult for Islamic societies to move from the institution of *waqf* into something better fitted to a modern economy, such as nascent forms of legal private property. As Kuran (p. 128) puts it: "An unintended consequence of the *waqf* system was the dampening of incentives to develop organizational forms suitable to large and durable commerical operations". He also points out how the specific Islamic inheritance laws, which we mentioned earlier "tended to fragment the estates of successful businessmen" (p. 77). Comparatively, he notes that Christian canon law had practices that were "relatively easy to modify, and attempts at reform were less likely to be resisted as sacrilegious" (p. 81). In our conceptualization, this again made the cultures using Christian law more fluid and those using Islamic law, undergirded by Islamic teachings, more hardwired.

The entanglement of Islamic cultural attributes may have also prevented configurations that would have allowed political reform toward non-autocratic political institutions. Legislation remained God's monopoly, reducing the role of legislative bodies. In addition, Platteau (2017) has argued that Islamic culture has generated an "obscurantist" equilibrium, whereby any argument against current rulers has to be couched in Islamic language. In Platteau's words: "When despots use religion to legitimize themselves in a highly contested environment they may provoke a countermove in the form of religious backlash in which the ruler and his opponents compete to demonstrate their superior fidelity to the faith" (p. 245). This type of equilibrium makes any political reform towards more representative institutions very difficult (see also Acemoglu and Robinson, 2019 and Kuran, 2023).

## 6 Conclusion

This paper has provided a new framework for understanding and studying the interrelationships between culture, institutions and various social outcomes. We differ from the view that cultures are coherent and stable, which is central to many of the early sociology works, for example those building on Talcott Parsons's seminal contributions and to the majority of current approaches in economics and political science that build on them. Rather, we emphasize the malleability and fluidity of cultures, especially in their ability to generate cultural configurations that support different political traditions, legitimizations, ideas and institutions.

Our framework has a number of distinctive features that set it apart from most of the new cultural economics literature. First, we adopt a "systems approach" to culture. This means, in particular, that the meaning and function of given attributes are determined within the whole

configuration and political equilibrium. As a result, attributes can modify their meaning rapidly as conditions are altered, and the persistence of a given attribute does not imply broader cultural persistence.

Second, our framework emphasizes discontinuous or "saltational" changes in culture as attributes are reconnected and acquire new meanings in response to evolving circumstances. This perspective contrasts sharply with existing approaches that are implicitly or explicitly based on evolutionary theories and allow only gradual change in culture.

It also implies that once saltational change happens as a consequence of one type of cultural struggle, it may lead to quite general reconnections of cultural attributes in other domains, as in the case of the English Civil War, potentially with a lot of unitended consequences.

Third, our framework suggests a key property of a given culture is the degree of fluidity, which determines the extent and rapidity of adaptation to new environments. Fluidity in turn depends on whether attributes are abstract or specific and whether they are free-standing or entangled. Importantly, however, less fluid cultures are not "bad cultures". Less fluid cultures often enable more effective coordination and more powerful political legitimization. Nevertheless, more fluid cultures may be better adapted to certain changes.

Finally, our framework enriches the relationship between institutions and culture. In addition to the degree of fluidity, "cultural struggles"—which result from efforts by adherents of different political and social projects to convince others—are often intermingled with political conflict, and the outcomes of these struggles determine the direction of institutional and cultural change.

We also took a stab at using this conceptual framework to interpret aspects of the nature and history of some of the major cultures, ranging from England to China, Islam and the Indian caste system.

This paper is a preliminary step. If the conceptual framework we propose is useful (something to be decided by other scholars in reference to other theoretical ideas, history and empirical evidence), then it will need elaboration and new ways of being operationalized in empirical and historical work. We end this paper with brief discussions of a couple of these directions.

**Theory:** The first area that requires considerable work is to improve the conceptual framework proposed in the Appendix, including with formal modeling. Our preliminary attempt here has been no more than a sketch. Let us mention five directions we see as particularly important in future theoretical inquiries. First, it would be fruitful to explicitly recognize and model the diversity of interpretations and frameworks that exist within a population at any given point in time. From a modeling point of view, this would necessitate explicitly allowing for a distribution of cultural configurations within a group. These configurations interact, as people come into personal, economic and political contact, and thus, in general they need to be mutually understandable—so that people can coexist with those that have a different worldview and elements of social meaning. These

contacts also provide one way in which different cultural configurations spread in the population at the expense of others. Elite efforts and innovations by cultural entrepreneurs aimed at spreading some cultural configurations and producing new configurations can then be incorporated into this framework. An equilibrium in such a setting would be an evolving, and occasionally jumping, distribution of cultural configurations within the population.

Second, proper game-theoretic foundations, which recognize how cultural configurations are used and are endogenously updated, would be an important direction for future work as well. A preliminary attempt in this direction is Acemoglu and Jackson's (2015) work, where cultural configurations emerge as different generations interpret the signals they receive from the past to decide whether they are in a cooperative or noncooperative equilibrium. These agents then take actions anticipating how their actions will be interpreted in the future. Discontinuous change occurs because of highly informative actions (for example, from the behavior of prominent agents) or from endogenous leadership. Incorporating more realistic interactions within a generation, conflict of interest, the role of institutions, and richer forms of cultural perceptions into this type of framework would be challenging but worthwhile directions.

Third, much more is needed in the modeling of the joint evolution of culture, politics and institutions. One avenue that looks promising is to introduce elements that allow for broader interpretations of cultural configurations and discontinuous change into the type of model of the dynamics of institutions and culture analyzed in Bisin and Verdier (2017).

Fourth, it would be interesting to model how different types of attributes—including whether they are abstract or specific, or whether they are different in other dimensions than those emphasized here—influence the variety of cultural configurations that can be formed, how these interplay with game-theoretic aspects, and how they shape the fluidity of cultures.

Finally, an important direction for expanding the reach of this conceptual framework is to tackle the evolution of culture sets. While English or Chinese culture sets have much in common with those several centuries ago, there are also important new elements added to these sets as a result of major invasions and migrations (e.g., the arrival of Anglo-Saxons and Normans in the British Isles) or historic political changes (e.g., mass democracy in Britain or communist rule in China). A natural approach would be to allow slow, evolutionary changes and very rare disruptions in culture sets, while there is faster and more "endogenous" responses in cultural configurations produced out of these culture sets.

**Empirical Work:** Empirical implementation of the ideas proposed here is a challenging area for future research and here we simply share some possible strategies that may be fruitful. One direction is to build data sets for the analysis of cultural dynamics using historical documents, relying on a combination of natural language processing (NLP) methods and other approaches to classify texts. This strategy would exploit both the codification of important elements of cultural

configurations in written documents and the potential links between language and modes of thinking (along the lines of work in linguistics using phylogenic methods, such as Gray and Atkinson, 2003, and Mace, Holden and Shennan, 2005).[29] Using such data, one can investigate when cultural change accelerates and whether this takes the form of new arguments and innovations introduced by some prominent agents (elites or cultural entrepreneurs) spreading within the population. Although causality will always be difficult to establish, both the timing and the way in which new and unusual argument and sentence structures become more popular in new written texts may provide one window into developing such an understanding.

Similar methods applied to detailed texts can be used to measure the degree of cultural heterogeneity within the population and how different cultural configurations spread over time. One interesting dimension within this context would be to investigate whether, during certain periods, different cultural configurations become inconsistent with each other, adding a new dimension of polarization to social and political equilibria.

In addition, new NLP methods can be used to measure to what extent different attributes are abstract vs. specific or whether collections of them are free-standing vs. entangled, as well as other relevant dimensions. For instance, attributes that significantly change their meaning over time can be classified as abstract, while collections of attributes that have and maintain the same or very similar links to each other can be counted as entangled. Using such measurements, one can obtain some assessment of the degree of fluidity of different cultures and link the different types of interplay between institutions and cultural change to these fluidity measures.

Finally, it would be worth investigating empirically and historically whether attributes and cultural configurations shape individuals' modes of thinking. Consider the Confucian case discussed in Section 4: the *Mandate of Heaven* configuration is not a tangible political institution propagating autocracy. Rather, it may the inculcating in people a particular way of thinking that makes autocracy more likely or even pervasive within society. How does it do that? Once such a mode of thinking is in place, how difficult is it for a new cultural configuration to arise? Does a mode of thinking persist even after elements of an alternative cultural configuration are in place? These questions would necessitate new combinations of ideas from social psychology, sociology, political science and economics (see also DiMaggio, 1997).

# Appendix

In this Appendix, we briefly present a more formal representation of how attributes are connected and how we can think of a cultural configuration as consisting of (feasible) combinations of available attributes.

Mathematically, we can express the main ideas of our conceptual framework using the language

[29] One creative example of this type of work in economics is Michalopoulos and Xue (2021).

of networks or graph theory. As noted in the text, real-world cultures differ in terms of their attributes, but when two cultures have non-overlapping attributes, they cannot be ranked easily in terms of their flexibility. For this reason, in this Appendix, we focus on two *cultures*, $C$ and $C'$ that have the same *attributes*, given by the set $A$ (the set $A$ is also the set of nodes of a graph, as shown in Figure 1).

These two cultures may have different culture sets, because they may have different feasible connections between these attributes. The set of edges of these two cultures is $E \subset 2^{|A|}$. We also use $E$ to represent the set of all possible connections between any two attributes $a, a' \in A$ (and thus we allow configurations that consist of several disconnected components). The set of edges $E$ also gives the set of all of networks (graphs) $G$ that can be formed from the attributes in $A$, such as the light gray connections in Figure 1. The feasible subset of connections $E_f$ defines a subset of networks that are feasible, $G_f \subset G$ (in Figure 1, these correspond to the blue and red configurations). The *culture set* (of either $C$ or $C'$) is given by the set of attributes $A$ and the set of feasible connections, represented as the feasible subset $E_f \subset E$ and is thus equivalently represented by $G_f$.[30] Finally, a *cultural configuration* is an element $g \in G_f$ (see Figure 1). This terminology clarifies the distinction between a culture (together with its culture set) and a cultural configuration.

Using this notation we can also define a partial order over the set of cultures in terms of fluidity. Culture $C$ is *more fluid* than culture $C'$ if $G_f^{C'} \subset G_f^{C}$. Figure 4 in the text illustrates this idea. An extreme hardwired culture has, by definition, a culture set that allows only a single cultural configuration (for example, because it has few, very specific attributes and/or all of its attributes are entangled).

To understand the relationship between cultural configurations and political institutions, we introduce the "political outcome mapping" $\pi : G \to P$ that specifies how any possible cultural configuration translates into a political equilibrium (represented by elements of the set $P$). For example, elements of the set $P$ could correspond to democracy, denoted by $p_D$, versus monarchy, $p_M$, or theocracy, $p_T$, etc. Note that we are specifying the mapping $\pi$ not just for feasible cultural configurations in the culture set $G_f$, since we want to compare the political implications of cultural configurations across two societies that have potentially different sets of cultural configurations. With this terminology, we say that culture $C$ is more fluid than (allows a richer set of political institutions than) culture $C'$ if $G_f^{C'} \subset G_f^{C}$. This also implies that $\pi(G_f^{C'}) \subset \pi(G_f^{C})$, provided that $\pi$ is bijective (where $\pi(G')$ is defined as the set of all political institutions supported by the cultural configurations in the set $G'$). For example, we may have a situation in which $\{p_D, p_M, p_T\} \in \pi(G_f^{C})$,

[30] As noted in the text, we are using culture and culture set interchangeably most of the time, though one distinction is that a culture may undergo evolution over time by adding or subtracting attributes and admissible connections to its culture set. More specifically, we can define a culture $C$ by a collection of feasible culture sets, $\{(A_1^C, E_{f,1}^C), \ldots, (A_n^C, E_{f,n}^C)\}$, but we do not need this additional formalism for our discussion here.

while $\pi(G_f^{C'})$ only includes $p_T$. In other words, a culture is more fluid than another if it can generate justifications for and allows the emergence of a richer set of political equilibria.[31]

We can also use this notation to clarify how abstract vs. specific attributes and entangled vs. free-standing collections of attributes may matter. First consider entanglement. Entangled attributes travel together and thus reduce the set of feasible connections. Mathematically, this implies that if culture $C$ has more entangled attributes than culture $C'$, then $E_f^C \subset E_f^{C'}$, which will then lead to $G_f^C \subset G_f^{C'}$, i.e., greater fluidity for the latter culture. Once again, if the mapping $\pi$ is bijective, then $\pi(G_f^C) \subset \pi(G_f^{C'})$.

Next, turning to abstract vs. specific attributes, in the text we emphasized that abstract attributes allow more connections. Therefore, if culture $C$ has more abstract attributes than $C'$, then $E_f^C \subset E_f^{C'}$ and thus $G_f^C \subset G_f^{C'}$, and also $\pi(G_f^C) \subset \pi(G_f^{C'})$, provided that $\pi$ is bijective.

We can similarly consider the implications for economic arrangements. In this case, it is useful to introduce an underlying state of nature denoted by $\sigma \in \Sigma$. Denote economic arrangements by $x$, so that we have a mapping $\xi : G \times \mathcal{C} \to X$ specifying which economic arrangements are feasible given the entire set of feasible cultural configurations, but also making the set of feasible arrangements depend on the culture itself (where $\mathcal{C}$ is the set of feasible cultures). Economic success, for instance, GDP or economic growth, can be conveniently summarized by a function $Y(x, C, \sigma)$. Suppose, for simplicity, that $Y$ is high if $x = x^*(\sigma)$ when the underlying state is $\sigma$, and is low otherwise (this would apply if economic success does not directly depend on $C$, but our general framework allows such dependence). Suppose (counterfactually) that the political mechanism is such that the output maximizing feasible economic arrangement will be chosen. Then the question becomes whether $x^*(\sigma) \in \xi(G_f^C)$ for the relevant state $\sigma$. An interesting situation is when this is the case to start with, but then the state of nature changes from $\sigma$ to $\sigma'$, such that $x^*(\sigma') \notin \xi(G_f^C)$. This would capture a scenario in which a culture cannot generate new cultural configurations adapted to the changing conditions (and may consequently fall behind economically).

This scenario is also useful for clarifying our distinction between fluid and hardwired cultures from "good" versus "bad" cultures. In particular, a hardwired culture may be successful initially, precisely because it allows better coordination. Using our general notation, we can capture this with $Y(x, C, \sigma)$ depending on $C$ directly, and the coordination afforded by a relatively hardwired culture being valuable for economic success. This success would be redoubled if it is also the case that $x^*(\sigma) \in \xi(G_f^C)$, but it does not depend on this coincidence. However, as the state changes from $\sigma$ to $\sigma'$, the hardwired culture $C$ will have fewer options to respond to changes in environment, and may fall behind.

Finally, we reiterate a point we made in footnote 16: we are abstracting from the key issue

[31] The degree of fluidity cannot be fully captured by the number of feasible cultural configurations, since the culture may have many such configurations but they may have similar political implications. Our partial order circumvents this problem.

of who makes decisions about connecting different attributes, influencing the evolution of cultural configurations. We are also not specifying strategies relevant for change in cultural configurations in this setting. Any fully-specified theory of cultural change will have to enumerate different agents' strategies, how these strategies interact (e.g., learning and diffusion of ideas in society) and the manner in which these behaviors map into changes in cultural configurations.

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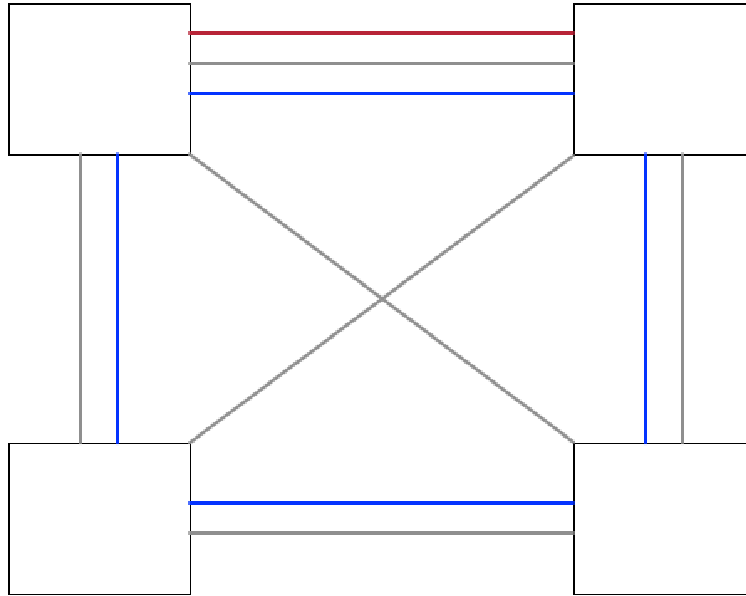


Figure 1: Attributes, connections and cultural configurations. In this graph, there are four attributes. The set of all possible connections is shown in gray. Note that for clarity we show possible connections, rather than all possible configurations, so in the figure any subset of the gray links would constitute a possible configuration. Not all of these configurations may be feasible in a culture set, however. As an illustration, the figure also shows a culture set consisting of two feasible cultural configurations (in blue and red) based on these attributes.

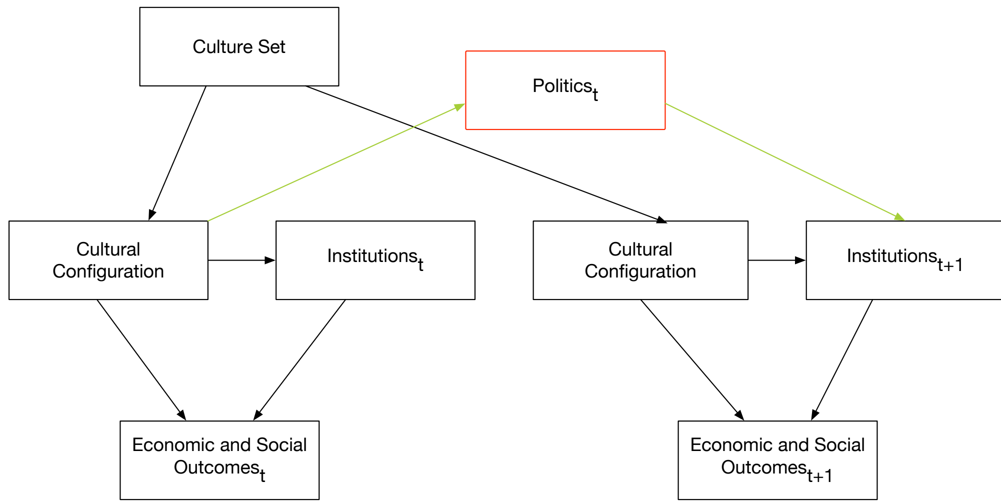



Figure 2: Culture-institution interactions for an extreme hardwired culture. Institutions and politics have no effect on cultural configurations.

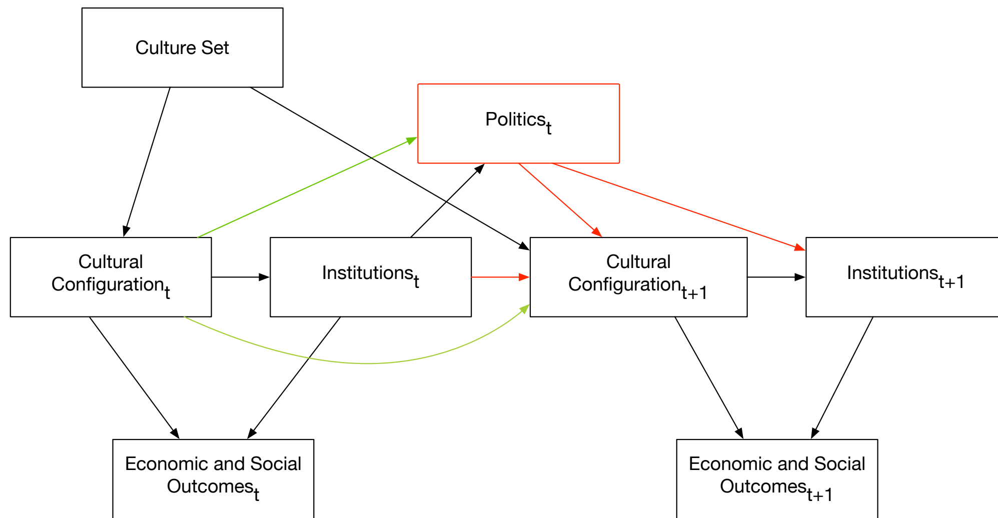
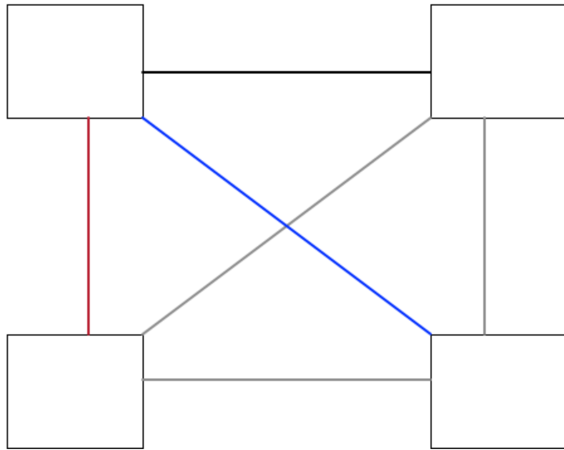
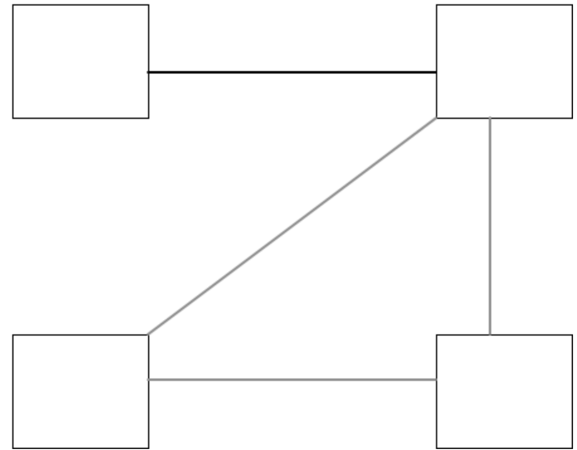



Figure 3: Culture-institutions interactions for a more fluid culture. Now institutions affect the evolution of cultural configurations and politics affect both institutions and cultural configurations (these new possibilities are shown by the red arrows).

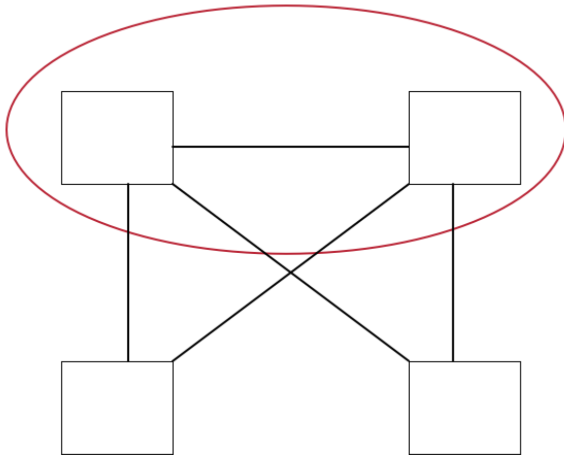


(a) The top left attribute is abstract

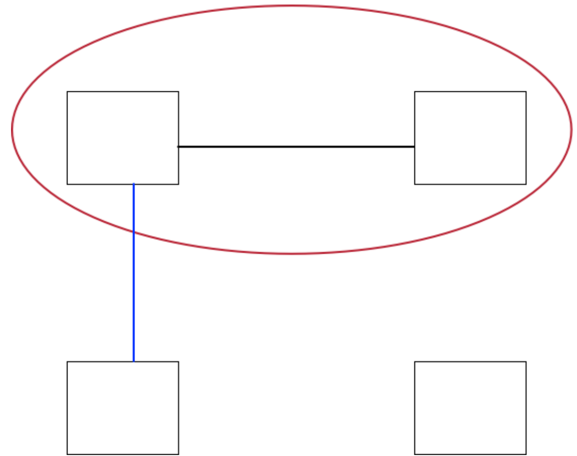


(b) The top left attribute is specific

Figure 4: Panel (a) depicts the case where the top-left attribute is abstract and can be feasibly linked to all three other attributes (these links are shown in different colors to highlight that they are possible links and could be part of different cultural configurations). Panel (b) shows the case where the same attribute is specific, and can only be linked to one other attribute.



(a) This pattern is allowed when the top two attributes are entangled



(b) This pattern is **disallowed** when the top two attributes are entangled

Figure 5: The top two attributes are entangled, and thus must have the same connections. Panel (a) depicts a feasible configuration, where these two attributes have exactly the same connections. Panel (b) shows a configuration that is disallowed, because the two top (entangled) attributes have different connections.

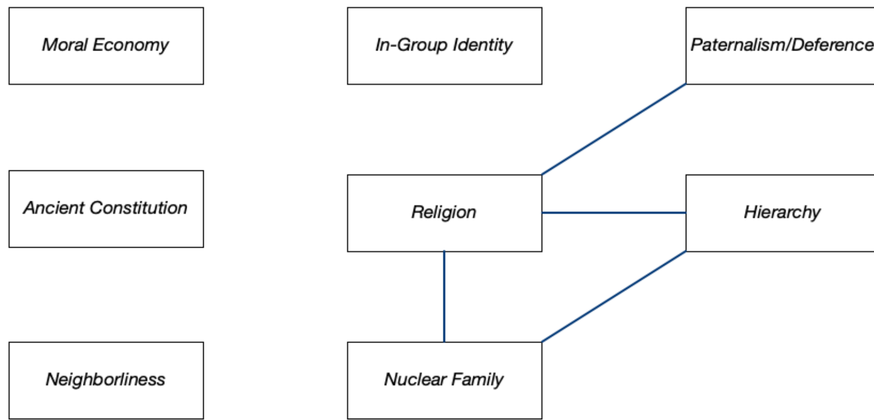



Figure 6: This figure lists some of the key attributes in the English culture set and shows how they may generate a cultural configuration, we call the *Divine Right of Kings*, which legitimizes absolutist rule.

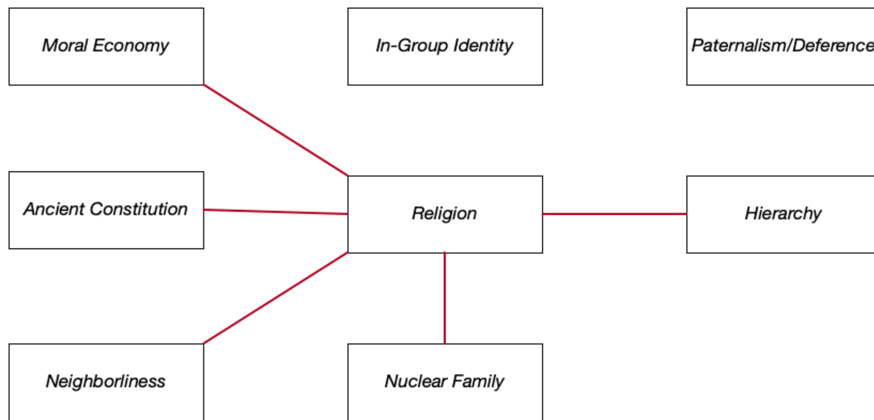



Figure 7: This figure shows how the same key attributes in the English culture set may generate a cultural configuration legitimizing *Popular Sovereignty* and democratic institutions.

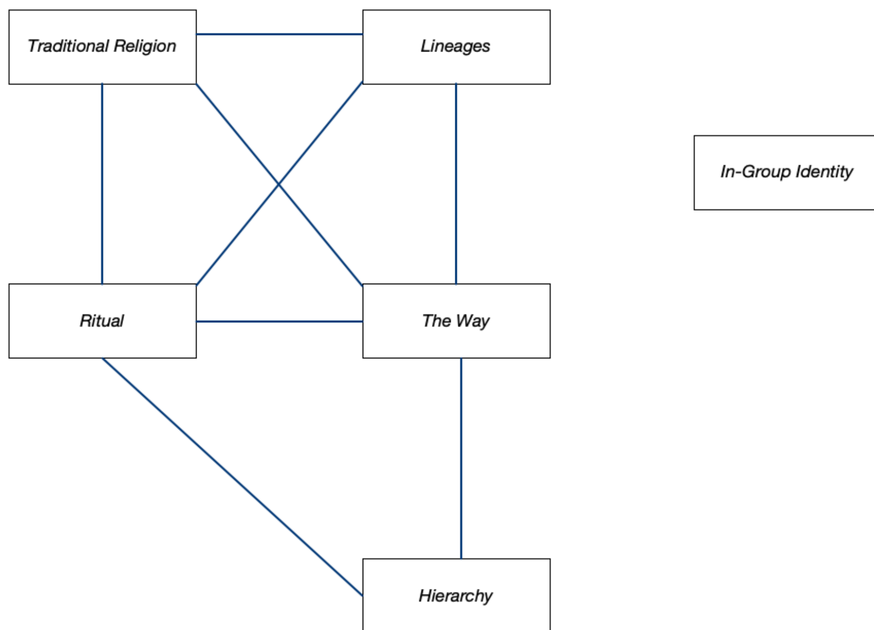



Figure 8: This figure lists some of the key attributes in the Chinese culture set and shows how they may generate a cultural configuration, the *Mandate of Heaven*, legitimizing absolutist imperial rule. Because *The Way* and *rituals* are entangled, they have the same set of connections.

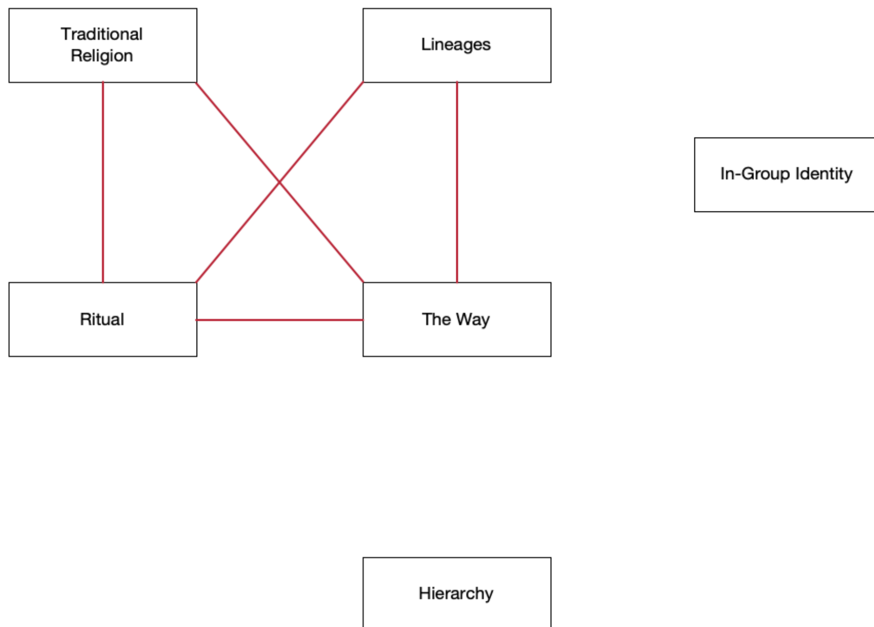



Figure 9: This figure shows how the same key attributes in the Chinese culture set may generate a cultural configuration, which we call *Confucian democracy*, supporting democratic participation. Because *The Way* and *rituals* are entangled, they have the same set of connections.